GENDER AND ADJUSTMENT

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Prepared for:
Office of Women in Development
Bureau for Research and Development
U.S. Agency for International Development
Washington, DC

October, 1992

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LIST OF ACRONYMS

A.I.D.	-	Agency for International Development
BARD	-	Barani Agricultural Research and Development
BOJ	-	Bank of Jamaica
BOP	-	Balance of Payments
CGEs	-	Computable General Equilibrium Models
CPI	-	Consumer Price Index
ECA	-	Economic Commission for Africa
EFF	-	Extended Fund Facility
EMO	-	Export Marketing Organization
FLFPR	-	Female Labor Force Participation Rate
FY	-	Fiscal Year
GDP	-	Gross Domestic Product
GFS	-	General Food Subsidy
GNP	-	Gross National Product
HES	-	Household Expenditure Survey
HYV	-	High Yielding Varieties
IDA	-	International Development Association
IFAD	-	International Fund for Agricultural Development
IMF	-	International Monetary Fund
IS	-	Integrated Survey
JCTC	-	Jamaica Commodity Trading Company
LFS	-	Labor Force Survey
LSMS	-	Living Standards Measurements Survey
LSS	-	Living Standards Survey
MIP	-	Modernization of Industry Program
MOE	-	Ministry of Education
MOH	-	Ministry of Health
MTEF	-	Medium Term Economic Framework
NGO	-	Nongovernment Organization
NICs	-	Newly Industrialized Countries
NIPS	-	National Institute of Population Studies
NIS	-	National Impact Survey

OECD	-	Organization for Economic Co-Operation and Development
PAMSCAD	-	Programme of Actions to Alleviate the Social Costs of Adjustment
PFP	-	Policy Framework Paper
PNA	-	Pakistan National Alliance
PPC	-	Program and Policy Coordination (Bureau for)
PPP	-	Pakistani People's Party
PS	-	Priority Survey
PSE	-	Primary School Enrollment
QRs	-	Quantitative Restrictions
RD	-	Research and Development (Bureau for)
SAL	-	Structural Adjustment Loan
SAM	-	Social Accounting Matrix
SAPs	-	Structural Adjustment Policies
SDA	-	Social Dimensions of Adjustment Unit
SECAL	-	Sector Adjustment Loan
SLC	-	Survey of Living Conditions
SSE	-	Secondary School Enrollment
SWP	-	Social Well-Being Program
UMOA	-	Union Monétaire Ouest Africaine
UN	-	United Nations
UNDP	-	United Nations Development Programme
WAMU	-	West African Monetary Union
WDR	-	World Development Report
WID	-	Women in Development

FOREWORD

Economic policy reform became an important objective of donor aid to developing countries during the 1980s and will continue to increase in scope during the early 1990s. In an attempt to restore economic growth to these economies, donor aid is increasingly linked to governmental reforms designed to reduce public sector control in favor of private sector actors and institutions. This process of adjustment will be painful for some population groups during the period of transition to sustained economic growth. Evidence has shown that responses to adjustment and policy reform vary by gender. Women tend to experience the short-term negative effects of adjustment particularly severely. For example, because women represent a disproportionate share of the poor in developing countries and frequently are the sole support of their families, cutbacks in governmental services often shift the costs of family health needs and education to adult females.

In recognition of these circumstances, the Office of Women in Development sought to commission a study to examine the gender dimension of adjustment policies in developing countries. It is hoped that this document will further the understanding of the issues associated with gender and structural adjustment and will provide the basis for constructive approaches to gender considerations in development.

ACKNOWLEDGEMENTS

This Gender and Adjustment report reflects the contributions of many people, including the staff of the Office of Women in Development, who have the mission and mandate to institutionalize the importance of systematic and equitable inclusion of women in A.I.D.'s development policies, goals, and processes. Special appreciation is due the PPC/WID staff, especially Mr. Ron Grosz, Project Officer, who provided continual encouragement, support, and challenge in the development of this publication. We are also grateful for the thoughtful comments of Ms. Tulin Pulley, Ms. Nina Bowen, Mr. Philip Boyle, and Mr. Edgar Ariza-Niño.

This document was prepared by a team of consultants and staff of The MayaTech Corporation. The technical team was led by Mr. Ron Hood and included Ms. Mary Altomare, Mr. Lawrence Haddad, and Ms. Martha Starr-McCluer. Ms. Virginia Hubbs and Ms. Cheryle Buggs provided staff review of the document and offered technical and editorial comments. Mr. Walter Faribault, III assisted with the graphics, and Mr. Steve Hirsch designed the cover. Ms. Kettly Paul and her word processing staff skillfully manipulated the text, tables, and figures in response to the many requests for revisions.

The views and interpretations expressed in this report are those of the authors and should not be attributed to the Agency for International Development.

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EXECUTIVE SUMMARY

This study deals with the gender dimension of adjustment policies in developing countries. Adjustment typically has two phases beginning with a stabilization or demand-management phase during which macroeconomic restraint plays a major role. The second phase involves structural reforms that bring relative prices into proper alignment and restore economic incentives necessary for renewed growth.

In the first phase, the key gender issue is the extent to which women and their dependents bear the burdens associated with restraint policies. The conclusions here are:

1. Women and members of female-headed households tend to suffer relatively more during the economic contraction associated with the stabilization phase of adjustment. Because women are frequently poorer to start with, reductions in living standards are more critical for them.

2. Women act as "shock absorbers" during adjustment, curtailing their own consumption and increasing work effort to compensate for household income losses.

3. Women are often more dependent on public services because of their child-bearing and child-rearing roles. The reductions in social spending that accompany adjustment efforts therefore affect them more directly than men. The shrinkage of government services "off-loads" responsibilities to the private sector--usually to women.

4. Education represents one of the most important factors in women's economic and social advancement, and it is often a victim of economic restraint.

5. Where there is relatively higher representation of women in the public sector, public expenditure restraint may have a greater impact on women than on men.

The evidence of relatively greater hardship for women is mixed, however, and is not overwhelming where it does occur. The data on household income, expenditure, and consumption and the anthropometric data suggest that there are pockets of hardship rather than a broad-based decline in women's relative well-being during economic contraction. Much of the evidence is clouded by the difficulty of determining what happens within the family where gender-based rights and obligations play a key role. In Islamic societies in particular, the rights of women are minimal, but they may be protected to some degree by paternalistic attitudes on the part of male decision-makers. Alternatively, they may be forced out of seclusion and into the workplace by economic necessity, and, although this may involve greater work effort, it may also contribute to greater independence in the longer run.

In the second phase of adjustment, the key gender issue is the relative participation of the two sexes in renewed growth or the "supply response." Here the results are less clear although the following points are coming into focus:

1. In the agricultural sector the emphasis on export production that accompanies adjustment can put pressure on women to reallocate their time and in some instances increase work effort toward the production of men's crops.

2. The emphasis on export production may result in a reduction in the amount of land available to women for producing food crops for own-consumption and local sale, making it more difficult for them to look after the needs of their families.

3. Barriers to women's full participation in the agricultural sector favored by adjustment include -

   a) unequal access to credit
   b) unequal access to land
   c) inability to benefit from extension services because of time and location constraints and cultural biases
   d) lower educational standards
   e) unequal control over family resources

4. In manufacturing, new industries using less capital-intensive technologies are opening opportunities for women in formal employment. Those most likely to benefit are single, childless, and urban or at least willing to move to the city. In agro-processing, some of the jobs may be rural or in smaller urban centers. The jobs are low-paying but require minimal skill and are no worse than subsistence farming. While needed to counter unemployment and underemployment, the number of these jobs that have emerged is still very small.

5. The service sector, especially the informal part of it, tends to be the sector of last resort. The ranks of higglers and those seeking domestic service jobs swell as recession hits. Women are strongly represented in these jobs and are frequently even more strongly represented among the newcomers. Unskilled women outside the work force have little choice but to enter this sector if they need to get work when their spouse is laid off. Core workers in this 'spillover' sector suffer crowding problems. They gain from general recovery, not so much because the sector is favored by the supply response following structural reforms, but because the competition thins.

6. The formal/informal sector distinction does not in itself throw great light on the issue of gender differences in the supply response. Further disaggregation into services, agriculture, urban, and rural is necessary before much of a general nature can be said. However, some of the points made under '5' above are applicable here.

7. The civil service retrenchment and reductions in service provision associated with stabilization hit women relatively more. The supply response--and with it the growing realization that government sector activities are needed to support the supply response--helps to reverse this effect on women so women gain in relative terms. This is particularly true in terms of social spending on health and education (on both the production and consumption sides).

This last point has a more general interpretation. If one builds a case that women are the first to be fired from the civil service based on seniority, are most vulnerable to income loss, are concentrated in most sharply contracting sectors, must curtail their personal consumption and increase their work effort the most, and are

generally more seriously affected by economic contraction, then surely they have relatively more to gain from renewed growth, quite apart from the fact that there may be some changes in the sectoral and occupational distribution of employment and income growth. Other things being equal, renewed growth benefits women more than men.

So far, supply responses have been small and most of the benefits of reform are still in the future. Many of the countries that have experienced growth since the time of deepest economic contraction still have not reached previous peaks of real output. These countries are retracing their steps. The full effects of changed relative prices and new institutional arrangements will not be felt while the economy is refilling existing excess capacity. Only when investment in new capital equipment and infrastructure is made will the new directions become apparent.

In saying that the old patterns will not be erased until the old equipment is worn out, we do not wish to imply that there are large stocks of idle capital just waiting to be switched on by appropriate policy refinements. In countries where adjustment problems have been the most acute, the official excess capacity figures can run to 70 percent or higher, but no one takes such numbers seriously--knowing that extensive restoration or complete replacement will be required.

Exhausted soils and machines patched without spares require investment. Countries working under heavy debt loads have very limited capacity for new or reconstructive investment. This is a major problem for many Latin American and African countries. Although it is less of an issue in Asia, it is in general the single biggest factor in the slowness or failure of the supply response in many adjusting countries. Per capita growth rates in sub-Saharan Africa, in Latin America and the Caribbean, and in the severely indebted middle-income countries have been negative through the 1980s. This stands in sharp contrast to the pre-adjustment period before 1980 when these countries enjoyed relatively strong rates of growth of per capita income. It also contrasts with the experience in Asia where growth rates accelerated after 1980.

The gender patterns involved in the supply response can be divided into three stylized cases. At one extreme are those where mobility, education, access to resources, and other relevant factors are uniform across gender. In this case, the process of adjustment may involve a sharp contraction of the economy and of living standards followed by renewed growth, perhaps along different lines. But the ratios of male to female employment, unemployment, wages, consumption, etc., stay constant. Here the gender dimension to adjustment is minimal. Of the case studies provided in the main paper, Jamaica is closest to this pattern.

At the other extreme, women are completely excluded from the economic world and have no property rights or decision-making authority. Women have no separate existence. All of their social and economic well-being is derivative of either their spouses or their fathers, and the men act in a strongly protective and paternalistic manner. This is the case before adjustment, and after it. Again, the gender dimension to adjustment is minimal. Of the case studies, Pakistan is closest to this pattern.

This is not to say that there is no gender aspect to the supply response in Pakistan or in Jamaica. The point is that socioeconomic conditions vary substantially across countries, making gender a more pertinent disaggregation for supply response analysis in some countries than others. The somewhat polar cases of Jamaica and Pakistan are useful for putting other countries into perspective. There is a lot of middle ground where women have significant economic involvement, but on unequal terms. This is represented in the case studies by Ghana and Côte d'Ivoire.

If, in these middle countries, women are not sufficiently mobile or educated to participate in the new growth or if they lack access to resources and their relative position consequently slides, the culprit is not adjustment, it is the traditions and cultural impediments to women's development that are to blame. In an important sense, the issue of women's participation in the supply response is not an adjustment issue but a developmental one. The implication for donors is clear. We must keep up the effort on the gender-related development fundamentals--health, education, access, rights. Only these can guarantee balanced participation in new growth. Moreover, we cannot expect results in the timeframe of the typical adjustment program. It simply takes much longer to change attitudes and behavior than it does to change the exchange rate, although this does not mean we should wait to change the exchange rate.

Finally, the case studies bring out an important point regarding the character of the adjustment problem. A broad range of countries represented by Ghana and Jamaica had relatively advanced social sector programs before the macroeconomics fell apart. These countries experienced very severe stabilization problems to which social spending may have contributed, although there were generally a number of other factors as well. Other countries such as Pakistan and Indonesia managed largely to avoid the serious macroeconomic imbalances and for them the gender impact of stabilization is not really much of an issue. But these countries avoided stabilization problems partly by neglecting human development and social spending. They now have a serious adjustment problem, too, although one does not see it so readily in the balance of payments numbers. One sees it in health, education, and nutrition. And these are the areas which are most likely to affect gender balance in the longer run.

These facts clearly demonstrate the need for gender-disaggregated indicators of social and economic conditions prior to, and during, the adjustment process. (A list of some forty such indicators commonly used is given in an appendix to the main paper.) These indicators must do several things.

1. They should provide a full spectrum of gender-disaggregated living standards data, including anthropometric, health, education, wages, consumption, income, and expenditure.

2. They should show the extent and nature of the economic involvement of both sexes in the economic system, including the division of labor, labor force participation, mobility, wage rates, decision-making authority, and command over resources.

3. They should show the relative dependence of the sexes on various elements of public spending and employment.

4. They should show nature and magnitude of the adjustment problems and the likely changes to prices and regulatory functions that form part of the structural reforms.

It is important to recognize that there are two basic types of indicators here. The first are what might be termed real time indicators and are covered mostly in point one above. These answer the question "How is it going?" and should be kept on a timely and regularly updated basis to monitor the effects of reforms and make corrections. The second are indicators of form and function. These answer the question "What is the potential for change here?" They are needed to predict how gender impacts of adjustment will vary between countries with differing structural problems and socioeconomic patterns. Both kinds of indicators are necessary to construct appropriate support measures. Emphasis in some existing research has been focused too much on real time

indicators only. A more balanced set of indicators will provide donors with a more appropriate and longer term developmental perspective on gender and adjustment issues. It will help them choose countries and programs that can use aid the most effectively and it will enable donors to sort out cause-and-effect issues that arise during adjustment without necessarily building elaborate econometric models.

I. INTRODUCTION AND SUMMARY OF CONCLUSIONS

This study examines gender and adjustment. It was commissioned by the Office of Women in Development, Bureau for Program and Policy Coordination (PPC/WID) at the United States Agency for International Development (U.S.A.I.D.) and was written in the summer and early fall of 1990. The results are based on existing data sources, and there was no in-country research or primary data collection. Throughout, there has been an effort to give balanced treatment to the sexes rather than to make this a "women and development" report.

A. Adjustment

The adjustment aspect of the study has two major components. The first deals with the costs of adjustment. Existing research suggests that declines in living standards are associated with adjustment programs, especially in the earlier stabilization phase. In some cases, the drop in living standards is the inevitable result of previous policy mistakes and uncontrollable external circumstances. Whatever the causes, the issue here is to see what bearing gender plays in the process, and to see what a gender perspective can contribute to the design of adjustment policies and aid programs that are better able to protect the vulnerable.

The second component of adjustment deals with the nature of the recovery that follows economic contraction. According to adjustment theory, fiscal and balance of payments deficits must be dealt with first using appropriate demand-management policies. Then growth or a "supply response" can be stimulated by implementing structural reforms that liberalize markets and eliminate the distortions and disincentives which cause resources to be misallocated and which may have contributed to fiscal and balance of payments deficits in the first place.

B. Gender

Gender issues also have two components. The first can be characterized as "gender affects adjustment." This means that gender issues are important in designing adjustment programs that work. Failure to account for gender issues may only become more obvious in the recovery phase of adjustment although the difficulties may be traceable to the stabilization phase. Care must also be exercised in separating long-standing gender/development problems from the independent effects of adjustment programs.

The second component deals with how "adjustment affects gender." Gender differences in the burden of adjustment are included here. But greater emphasis is placed on the recovery phase during which new market opportunities are opened up and the gender balance of adjustment benefits are determined. This is an important and much less studied issue. If the expanding sectors have a different gender balance than the status quo, and if conditions relating to education and access to resources are right, adjustment can create pressures that will change the social order. Or it can reinforce old patterns. Much depends on individual country circumstances.

C. Timeframe

It is important to put the timeframe of adjustment into perspective. The general tendency has been toward shortsightedness. This applies to both program design and to the subsequent retrospective analysis. The following points are relevant:

1. Individual human costs incurred during stabilization have visible short-run effects, but they also have important consequences for growth that show up in the life cycle or generation timeframe.

2. "Getting prices right" in the structural adjustment phase puts appropriate incentives in place, but perception and reaction times to these incentives may be very long. The failure of foreign investment to materialize has frustrated adjustment initiatives in a number of countries. Local residents with few savings, poor information, and little education can hardly be expected to react faster, especially when public sector support needed for making transitions is likely to be constrained.

3. The emergence of new sectors potentially alters income opportunities between the sexes. This can be progressive, but uptake rates may be slowed by the existence of various cultural traditions. Adjustment policies acting through market channels and through alteration of government expenditures can have a powerful effect on traditional patterns of social behavior, but the appropriate timeframe is decades not quarters.

4. Adjustment programs have often been implemented haltingly and incompletely. The cost of half measures is a deepening of injury and delay of recovery.

5. The recovery phase of most adjustment programs is only just beginning. The new patterns that are likely to emerge as a consequence of structural reforms are just starting to show themselves.

D. Case Studies

This paper is based on the adjustment experiences of four countries: Jamaica, Pakistan, Ghana, and Côte d'Ivoire. The country selection was based on a number of criteria:

1. Region. The countries span three geographic regions. It would have been desirable to include a Latin American country as well, but the time and resources did not permit it.

2. Adjustment severity. The countries span a range of adjustment problems from severe to moderate in the following order: Jamaica, Ghana, Côte d'Ivoire, Pakistan.

3. Population. This runs from less than 3 million in Jamaica to over 100 million in Pakistan.

4. Gender differences. In Jamaica, literacy rates are higher for women than for men, while in Pakistan, women's literacy rates are among the lowest in the world. Ghana and Côte d'Ivoire are intermediate. Patterns for labor force participation cover a similar spread. The proportion of female-headed households in Jamaica is one of the world's highest, and it is one of the world's lowest in Pakistan.

Data availability was also critical. Gender-disaggregated data are generally poor in developing countries. The countries that have been chosen have better data than most, although there are still a number of shortcomings.

E. Conclusions

The case studies form the basis for several conclusions about gender and adjustment. In terms of the costs of adjustment:

1. It appears that women and members of female-headed households tend to suffer relatively more during the economic contraction associated with the stabilization phase of adjustment. This is because they are frequently poorer to start with and so reductions in living standards are more critical for them.

2. Women also act as "shock absorbers" during adjustment, curtailing their own consumption and increasing work effort to compensate for household income losses.

3. Women are often more dependent on public services because of their child-bearing and child-rearing roles. The reductions in social spending that accompany adjustment efforts therefore affect them more directly than men. The shrinkage of government services "off-loads" responsibilities to the private sector--usually to women.

4. Education represents one of the most important factors in women's economic and social advancement, and it is often a victim of economic restraint.

5. Where there is relatively higher representation of women in the public sector, public expenditure restraint may have a greater impact on women than on men.

It should be emphasized, however, that the evidence of relatively greater hardship for women is mixed and is not overwhelming where it does occur. The data on household income, expenditure, and consumption and the anthropometric data suggest that there are pockets of hardship rather than a broad-based decline in women's relative well-being during economic contraction. Much of the evidence is clouded by the difficulty of determining what happens within the family where gender-based rights and obligations play a key role. In Islamic societies, in particular, the rights of women are minimal, but they may be protected to some degree by paternalistic attitudes on the part of male decision-makers. Alternatively, they may be forced out of seclusion and into the workplace by economic necessity. Although this may involve greater work effort, it may also contribute to greater independence in the longer run.

In terms of participation in the supply response, the results are less clear cut. However, the following points are coming into focus as supply response progresses:

1. In the agricultural sector, the emphasis on export production that accompanies adjustment can put pressure on women to reallocate their time and, in some instances, increase their work effort toward the production of men's crops.

2. The emphasis on export production may result in a reduction in the amount of land available to women for producing food crops for own-consumption and local sale, making it more difficult for them to look after the needs of their families.

3. Barriers to women's full participation in the agricultural sector favored by adjustment include -
   a) unequal access to credit;
   b) unequal access to land;
   c) inability to benefit from extension services because of time and location constraints and cultural biases;
   d) lower educational standards; and
   e) unequal control over family resources.

4. In manufacturing, new industries using less capital-intensive technologies are opening opportunities for women in formal employment. These jobs are important as new sources of employment for women. Those most likely to benefit are single, childless, and urban women or those at least willing to move to the city. In agro-processing, some of the jobs may be rural or in smaller urban centers. The jobs are low-paying but require minimal skill and are no worse than subsistence farming. While needed to counter unemployment and underemployment, the number of these jobs that have emerged is still very small.

5. The service sector, especially the informal part of it, tends to be the sector of last resort. The ranks of higglers and those seeking domestic service jobs swell as recession hits. Women are strongly represented in these jobs and are frequently even more strongly represented among the newcomers. Unskilled women outside the work force have little choice but to enter this sector if they need to get work when their spouse is laid off. Core workers in this "spillover" sector suffer crowding problems. They gain from general recovery, not so much because the sector is favored by the supply response following structural reforms, but because the competition thins.

6. The formal/informal sector distinction does not in itself throw great light on the issue of gender differences in the supply response. Further disaggregation into services, agriculture, urban, and rural is necessary before much of a general nature can be said. However, some of the points made under '5' above are applicable here.

7. The civil service retrenchment and reductions in service provision associated with stabilization hit women relatively more than men. The supply response--and with it the growing realization that government sector activities are needed to support the supply response--helps to reverse this effect on women, so women gain in relative terms. This is particularly true in terms of social spending on health and education (on both the production and consumption sides).

This last point has a more general interpretation. If one builds a case that women are the first to be fired from the civil service based on seniority, are most vulnerable to income loss, are concentrated in most sharply contracting sectors, must curtail their personal consumption and increase their work effort the most, and are

generally more seriously affected by economic contraction, then surely they have relatively more to gain from renewed growth, quite apart from the fact that there may be some changes in the sectoral and occupational distribution of employment and income growth. Other things being equal, renewed growth benefits women more than men.

It is critical to recognize that supply responses so far have been small. It is probable that most of the positive reaction to policy changes is still in the future. The current evidence, therefore, does not give us much to go on in judging the exact nature of anticipated growth. Many of the countries that have experienced growth since the time of deepest economic contraction still have not reached previous peaks of real output. These countries are retracing their steps. The full effects of changed relative prices and new institutional arrangements will not be felt while the economy is refilling existing excess capacity. Only when investment in new capital equipment and infrastructure is made will the new directions become apparent.

In saying that the old patterns will not be erased until the old equipment is worn out, we do not wish to imply that there are large stocks of idle capital just waiting to be switched on by appropriate policy refinements. In countries where adjustment problems have been the most acute, the official excess capacity figures can run to 70 percent or higher, but no one takes such numbers seriously, knowing that extensive restoration or complete replacement will be required.

Exhausted soils and machines patched without spares require investment. Countries working under heavy debt loads have very limited capability for new or reconstructive investment. This is a major problem for many Latin American and African countries. Although it is less of an issue in Asia, it is in general the single biggest factor in the slowness or failure of the supply response in many adjusting countries. As Table 1 shows, per capita growth rates in sub-Saharan Africa, Latin America, and the Caribbean, and the severely indebted middle-income countries have been negative through the 1980s. This stands in sharp contrast to the pre-adjustment period before 1980 when these countries enjoyed relatively strong rates of growth of per capita income. It also contrasts with the experience in Asia where growth rates accelerated after 1980.

Table 2 shows terms of trade and Table 3 shows investment and savings as a percent of gross domestic product (GDP). Both highlight the regional differences. In East Asia, savings and investment were consistently over 30 percent of GDP through the 1980s. In sub-Saharan Africa, investment fell from 20 percent of GDP to 12 percent between 1980 and 1985, and has since recovered to only 15 percent. Savings fell to less than 10 percent and have not recovered at all. The savings performance of the Latin American and South Asian countries has been better but is still well short of that of East Asian countries.

Terms of trade shifts, which were an important factor in creating the need for adjustment, have continued through the 1980s and have also played a role in frustrating the supply response. Again, the African and Latin American economies have been harder hit than the Asian countries. Oil and commodity price shifts are important here. Countries whose natural resource endowments are concentrated in areas where prices are falling are bound to suffer. But it is also true that countries with low rates of investment cannot diversify and alter the pattern of production in response to changing relative prices. Growth and adaptation are mutually supportive in a way that Asia has sorted out and Africa has not.

The gender patterns involved in the supply response can be divided into three stylized cases. At one extreme are those where mobility, education, access to resources and other relevant factors are uniform across gender. In this case, the process of adjustment may involve a sharp contraction of the economy and of living

TABLE 1

PER CAPITA GROWTH RATES, 1965-89

	1965-73	1973-80	1980-86	1987	1988	1989*
	Average Annual Percentage Change					
Low- and Middle-Income Countries	4.0	2.6	1.5	2.7	3.4	1.2
Sub-Saharan Africa	3.0	0.1	-2.8	-4.4	-0.8	0.5
East Asia	5.4	4.4	6.6	8.0	8.7	3.1
South Asia	1.0	2.0	3.2	0.9	6.1	2.3
Europe, Middle East, North Africa	5.6	2.1	0.8	-0.6	0.1	0.6
Latin America and Caribbean	4.1	2.4	-1.6	1.5	-0.8	-0.8
High Debt Countries	4.2	2.6	-1.5	1.2	-0.4	-0.7
High-Income Countries	3.5	2.2	1.7	2.5	3.5	3.1

* preliminary
SOURCE: WORLD DEVELOPMENT REPORT, 1990.

TABLE 2

TERMS OF TRADE, 1965-89

	1965-73	1973-80	1980-86	1987	1988	1989*
	Average Annual Percentage Change					
Low- and Middle-Income Countries	0.1	2.5	-2.7	-10.9	2.3	-0.2
Sub-Saharan Africa	-8.5	4.8	-4.0	-21.5	2.9	-4.4
East Asia	-0.6	1.2	-1.3	-6.1	0.5	1.1
South Asia	3.7	-3.4	1.5	3.1	1.2	2.0
Latin America and Caribbean	3.8	2.3	-3.3	-14.0	-2.3	1.7
High Debt Countries	4.3	1.7	-2.2	-11.4	1.6	0.2
High-Income Countries	-1.2	-2.1	0.5	7.0	0.2	0.5

* preliminary
SOURCE: WORLD DEVELOPMENT REPORT, 1990.

TABLE 3

SAVINGS AND INVESTMENT, 1965-88

	1965	1973	1980	1985	1986	1987	1988
			Savings (Percent of GDP)				
Low- and Middle-Income Countries	18.9	21.7	23.6	21.2	20.8	22.3	22.6
Sub-Saharan Africa	13.8	16.9	18.2	8.8	6.7	8.1	8.3
East Asia	22.3	25.8	29.7	29.5	31.1	33.3	33.3
South Asia	11.9	14.9	15.3	18.0	17.2	17.9	18
Europe, Middle East, North Africa	17.8	24.2	25.8	22.3	21.1	18.8	..
Latin America and Caribbean	21.1	19.4	20.3	16.8	14.9	17.9	19.6
High Debt Countries	21.0	19.5	20.5	18.0	16.1	18.8	20.9
High-Income Countries	17.7	24.1	23.2	20.4	20.7	20.9	22.2
			Investment (Percent of GDP)				
Low- and Middle-Income Countries	20.4	23.2	26.9	24.1	24.2	24.1	25.6
Sub-Saharan Africa	14.3	18.3	20.5	12.2	14.6	15.4	15.4
East Asia	22.3	27.3	30.7	30.9	30.1	29.8	30.9
South Asia	16.8	17.0	22.1	23.9	22.8	21.3	22.1
Europe, Middle East, North Africa	22	25	31	28.3	..	..	..
Latin America and Caribbean	20.3	21.2	24.2	17.6	17.4	19.7	21.5
High Debt Countries	20.9	21.5	25.1	18.7	18.7	20.5	22.4
High-Income Countries	16.7	22.7	22.0	19.7	19.9	20.4	21.6

*preliminary

SOURCE: WORLD DEVELOPMENT REPORT, 1990.

standards followed by renewed growth, perhaps along different lines. But the ratios of male to female employment, unemployment, wages, consumption, etc., stay constant. Here the gender dimension to adjustment is minimal. Of the case studies, Jamaica is closest to this pattern.

At the other extreme, women are completely excluded from the economic world and have no property rights or decision-making authority. Women have no separate existence. All of their social and economic well-being is derivative of either their spouses or their fathers, and the men act in a strongly protective and paternalistic manner. This is the case before adjustment, and after it. Again, the gender dimension to adjustment is minimal. Of the case studies, Pakistan is closest to this pattern.

This is not to say that there is no gender aspect to the supply response in Pakistan or in Jamaica. The point is that socioeconomic conditions vary substantially across countries, making gender a more pertinent disaggregation for supply response analysis in some countries than others. The somewhat polar cases of Jamaica and Pakistan are useful for putting other countries into perspective. There is a lot of middle ground where women have significant economic involvement, but on unequal terms. This is represented in the case studies of Ghana and Côte d'Ivoire.

If, in these middle countries, women are not sufficiently mobile or educated to participate in the new growth or if they lack access to resources and their relative position consequently slides, the culprit is not adjustment, it is the traditions and cultural impediments to women's development that are to blame. In an important sense, the issue of women's participation in the supply response is not an adjustment issue but a developmental one. The implication for donors is clear. We must keep up the effort on the gender-related development fundamentals--health, education, access, rights. Only these can guarantee balanced participation in new growth. Moreover, we cannot expect results in the timeframe of the typical adjustment program. It simply takes much longer to change attitudes and behavior than it does to change the exchange rate, although this does not mean we should wait to change the exchange rate.

Finally, the case studies bring out an important point regarding the character of the adjustment problem. A broad range of countries represented by Ghana and Jamaica had relatively advanced social sector programs before the macroeconomics fell apart. These countries experienced very severe stabilization problems to which social spending may have contributed, although there were generally a number of other factors as well. Other countries such as Pakistan and Indonesia managed largely to avoid the serious macroeconomic imbalances and for them the gender impact of stabilization is not really much of an issue. But these countries avoided stabilization problems partly by neglecting human development and social spending. They now have a serious adjustment problem, too, although one does not see it so readily in the balance of payments numbers. One sees it in health, education, and nutrition. And these are the areas which are most likely to affect gender balance in the longer run.

II. THEORIES AND MODELS

A. Initial Studies

The studies that first began to question the distributional impacts of stabilization and adjustment were from Jolly and Cornia (1984) and Jolly (1985). The expression "adjustment with a human face" was coined, with these studies concluding that "adjustment policy...transmits and usually multiplies the (negative health) impact on the poor and vulnerable" (Jolly, 1985). These papers were invaluable in raising the questions, and the profile of the questions, relating to the effects of stabilization and adjustment on key vulnerable groups such as women and children. However, the papers were criticized for failing to separate the effects of adjustment on the poor from the effects of the crisis that triggered the need for adjustment in the first place. For instance, Behrman (1988) states:

> the individual chapters in Jolly and Cornia (1984) provide a useful catalogue of trends, but relatively little information on changes due to recessions and economic adjustment programs. Given the project focus on finding possible negative recessionary and economic adjustment impact on children, the authors appear to have pressed hard to find examples of deterioration in children's conditions. But they provide relatively little direct evidence of such deterioration.

Elson (1988) criticizes the "human face" literature as being concerned only with protection of the poor and vulnerable rather than the transformation of more fundamental "oppressive social relations." However, while her "gender aware approach to structural adjustment" emphasizes the need for a change in existing social relations, it is disappointingly only in order for women to "survive" the adjustment process rather than contribute to it. One of the most interesting insights in her paper is in the dangers of treating women "as an isolatable group" and "not in terms of their interactions with men."

Moser's (1989) work on adjustment and gender in the context of data on low-income women in Ecuador also focuses on the way in which women and female-headed households cope with the burdens of adjustment. A longitudinal case study is presented of an urban low-income community in Guyaquil, Ecuador. Data have been collected at two points in time, 1978 and 1988, which "provide the opportunity to examine the relevance of three kinds of male bias" originally defined by Elson (1988). There is male bias concerning the sexual division of labor, the assumption that the burden of social services can be costlessly shifted from the state to females within the household, and the assumption of the household behaving as if it had maximized a household utility function under the assumption of common preferences.

In Moser's analysis, low-income women are classified as those who are "coping" with changes in the economic environment, those who are "burned out," and those who are "hanging on." She defines "copers" as women who are balancing their four roles: producers, home managers, community organizers, and mothers. They represent 30 percent of her longitudinal sample and are generally involved in stable relationships with partners who have a reliable source of income. Those women who are "burned out" are not balancing their four roles, with the productive role dominating. They tend to be older, female heads, who delegate many of their

reproductive responsibilities to younger female household members and constitute approximately 15 percent of her sample. The remaining 55 percent of the women are "hanging on," under pressure but still trying to balance the four roles while the time tradeoffs become ever sharper.

Although it is difficult to draw any sharp conclusions from her longitudinal data set due to the low sample size (249 individuals), this paper provides us with a good sense of the extreme difficulties low-income women face in balancing their roles and the severity of some of the tradeoffs involved.

In 1988 the Commonwealth Secretariat set up an Expert Group on Women and Structural Adjustment in order to "identify the extent of women's contribution to different economies, examine the evidence of the impact of structural adjustment measures, and consider alternative policies that would be socially and economically more effective" (Commonwealth Secretariat 1989). The Expert Group asked the Secretariat to commission case studies in nine Commonwealth developing countries (Bangladesh, Jamaica, Malaysia, Nigeria, Sri Lanka, Tanzania, Trinidad and Tobago, Zambia, and Zimbabwe) because the "inadequacy of sex-disaggregated data and the scarcity of studies on the effects of structural adjustment policies on women severely constrained our work." Although Pakistan, Ghana, and Côte d'Ivoire do not appear on this list, it is unfortunate that we have not, as yet, been able to obtain access to these studies.

Palmer (1988) is another researcher to emphasize differential response abilities, or the "ability to adjust to adjustment" (Streeten, 1987). Palmer states "women manage and are accountable for much agricultural production while there may be exchanges of resources between wife and husband. Without some understanding of this, policy makers will plan prices, investments, and support services without recognizing opportunity costs within the household level economy."

Weekes-Vagliani (1990) has also proposed 16 different typologies for the analysis of gender and adjustment issues. These include standard disaggregations by region, household expenditures, educational levels, and occupations, and some more innovative ones such as household formation (nuclear/extended) and age structure of husband-wife relationships. The specifics of her analysis were unavailable at the time of writing, but her paper is focused on the matching up of any new opportunities arising out of structural adjustment with traditional activity and occupational patterns, rather than the potential for and/or the success of, women being attracted into new sectors and spheres of production.

Four streams run through all this work.

1. There appears to be a gender dimension to the allocation of the burdens of adjustment.

2. Simply taking "before and after" socioeconomic measurements does not give adequate insight into the adjustment process because it does not deal with the "counterfactual" issue of what would have happened had some other response been taken to adjustment problems.

3. A more complete examination of the social and economic relationships between the sexes and their respective roles in the economic system is necessary to understand the gender dimension of the costs of adjustment.

4. Beyond the burden of adjustment, there is a potential "supply response" to which there may also be a gender dimension.

Implicit in these four points are two important concepts. First, failure to adequately incorporate gender into the analysis of adjustment can lead to sub-optimal adjustment policies because gender affects adjustment. Second, policies adopted during adjustment can condition the supply response in a way that can permanently alter the roles and responsibilities, as well as the relative welfare of men and women. In other words, adjustment affects gender.

B. The Simple Three-Sector Approach

These issues point to the need for a more comprehensive and functionally-based framework. Several such approaches to analyzing gender and adjustment have been tried. One of the most useful is that developed by Collier (1989, 1990) expanding on work done by Addison and Demery. This approach takes adjustment to be a matter of resource mobility, especially in labor markets. The readiness with which people and resources shift in response to adjustment policies determines not only the depth and distribution of adjustment costs but also the degree to which various groups participate in the ultimate benefits of liberalization. By highlighting the role of labor markets, this approach is able to deal effectively with gender aspects of both the burden of adjustment and the supply response.

The analysis begins with the gender differences in the sectoral distribution of labor. If all labor were perfectly mobile, there would be little reason to suspect any particular gender differences across sectors. However, there are often sharp differences in the sectoral distribution of male and female labor and these are attributable to four separate factors.

1. **Extra-household discrimination** takes the form of social or traditional practices that result in gender-based differentials in wages, credit access, and other variables, that bear no relationship to education, creditworthiness or other economically relevant factors.

2. **Asymmetric rights and obligations** within the household provide for the division of labor and decision-making authority in gender-specific patterns.

3. **Role model** behavior that follows gender lines keeps the integrity of the pattern of rights and obligations through generations and also conditions changes in intra-household behavior that reflect new external circumstances.

4. **The burden of child rearing** circumscribes female activities in terms of energy, health, time, and place in a way that affects labor force participation patterns.

These four factors "skew" the gender patterns of labor force participation across sectors. The next step in the analysis is therefore to see how the impact of adjustment on the relative growth of each sector lines up with the gender concentrations. In other words, who is in the winning sectors.

The usual way to proceed is to divide adjustment into "stabilization" and "structural" phases. Stabilization refers to the policies necessary to eliminate balance of payments and fiscal deficits. These usually involve devaluation, public expenditure reductions, monetary restraint, and other demand-management initiatives. Structural adjustment involves liberalization of markets, privatizations, and the phase-out of interventions--many of which may represent earlier (inappropriate) efforts to deal with balance of payments difficulties.

Sectors are divided into three categories:

1. **Non-tradables** - of which domestic services and yam production might be taken as typical;

2. **Exports and unprotected importables** - usually a resource product such as timber or copper, plus imported or importable products such as basic foods which are not subject to import duties or quotas.

3. **Protected importables** - protected domestic production, typically such things as plastic ware, batteries, and matches.

Roughly speaking, adjustment will cause a contraction of the protected importable sector, and an expansion of the export and unprotected importable sector. The non-traded goods sector may expand or contract depending on individual country characteristics.

One can also examine the relative performance of the three sectors over the separate stabilization and structural adjustment phases. This will give insight into the impact and longer term effects of adjustment. It is not always possible to draw firm a priori conclusions about relative sector performance without examining individual cases. For instance, the stabilization phase in one program might allow relatively high tariffs to persist in the interests of budgetary stability while another program emphasizes increases in domestic commodity taxation. This will make a big difference to the relative performance of the protected importable sector during the stabilization phase.

The gender ratios across sectors give only part of the picture. Men and women have different capacities to shift between sectors. Even if the sexes were initially evenly spread across sectors, adjustment pressures will cause the less mobile sex to become concentrated in the contracting sectors.

Several non-market factors affect labor mobility. Some relate to information: extension agents (public process) and imitation (private process). If role-copying behavior is important, then female-headed households will have a lower propensity to enter those sectors in which they are initially underrepresented, and any government extension-worker male-bias (either because they are mostly men, or because they focus on existing growers) will reinforce this immobility. In addition, the principal-agent problem may reduce the effectiveness of any female labor that is attracted into the export sector if the export crop revenues are controlled by men. In addition to problems with their labor mobility, females are less likely to be able to acquire new capital (necessary if capital is sector-specific) through either the savings or credit routes. As Collier (1990) notes, "a symptom of female disadvantage in private savings and credit processes is that informal savings clubs (collusive arrangements between agents to make regular deposits into a common fund which lends in rotation) seem to be predominantly female."

Mobility and skewness patterns vary from country to country so care is needed in generalizing about the gender dimensions of adjustment. However, some examples that focus on the agricultural sector may be useful to highlight commonly occurring situations.

1. Food is a protected importable and this sector contracts during the course of adjustment. There is a high concentration of female labor in this sector; thus, female labor mobility is crucial.

2. Food is an unprotected import substitute or export produced by both men and women. This sector expands during adjustment; thus, male labor has to be mobile, female productivity has to be raised (i.e., education, credit, and savings barriers must be reduced) or female labor supply has to be raised (difficult to do if time burdens are already very heavy).

3. Food is a non-traded good produced largely by women and it competes for land with an export crop. The adjustment raises the relative price of exports to non-traded food, placing strong demands on women to shift sectors.

4. Internal infrastructure is poor, making food both a non-tradable in the rural areas, and an unprotected import-substitute in the urban areas. The effect of adjustment is therefore to raise food prices in and around the cities relative to the more distant rural areas. The overall production effects are ambiguous, but incentives arise to move food from rural to urban areas requiring an expansion of food marketing activities which are typically female-dominated. This means that females will require access to more resources.

In cases one and three, women are in sectors from which resources must exit and their labor mobility is crucial. In cases two and four, women are initially located in sectors that have to expand and so women's access to resources other than their own labor proves to be the dominant consideration.

The overall level of female participation is also important. If it is low, then the mobility of males alone may be enough to accommodate adjustment pressures and women will not be trapped in low return enclaves. In Pakistan, for instance, the labor force participation of women may be underestimated, but it is undoubtedly much lower than in many other developing countries. The need to redress adjustment-induced imbalances in labor supply and demand across sectors can easily be met by shifts within the male labor force alone. By contrast, in West Africa the participation of women is substantial in several sectors. It may not be possible for adjustment to be complete without at least some women moving.

The West African case brings out several important points. If mobility of both sexes is required for full adjustment, yet one sex is immobile, there are two distinct implications:

1. **Distribution:** The less mobile sex will suffer a decline in real wages (adjustment affects gender).

2. **Efficiency:** There will be losses to the economy as a whole signalled by widening male-female wage differentials (gender affects adjustment).

C. More Comprehensive Models of Gender and Adjustment

The three-sector model is useful for evaluating the relationships between gender and adjustment by providing a simple mechanism that connects the macro level adjustment policies with micro level outcomes. But the simplicity comes at a significant cost in terms of detail and realism. The model covers only a narrow and stylized set of policies: devaluation, tariff changes, money growth, and the fiscal deficit. In practice, the implementation of these policies can vary significantly in terms of timing, sequencing, and incidence, and other complementary policies that may be introduced.

The simple three-sector model also relies heavily on gender-based labor market imperfections to generate the distributive and efficiency results. This focus on the production side ignores the effect of changes in relative prices on various consumer groups whose shopping baskets may contain very different combinations of goods, including government services.

In reality, a wide range of other intermediate or "meso" factors are at play in addition to those related to labor markets. The Social Dimensions of Adjustment (SDA) unit of the World Bank's Africa region states the problem as follows:

> As a basis for policy design, the SDA initiative must establish analytically the links between the macro-economy on the one hand and the micro-economy of households and enterprises on the other. This link between the macro and the micro, termed the "meso" (or middle), comprises the following key elements: markets...product and factor...official and parallel...physical infrastructure... health, education, nutrition support and other transfers (World Bank, 1990).

This statement of the problem is similar to that of the Cornell University research program for the Africa Bureau of A.I.D. While the Cornell emphasis is shaded toward nutrition outcomes, the objectives are to identify the macro-micro links in order to be able to design policies that reduce the social costs of adjustment (Scobie, 1989).

Incorporating these additional factors can complicate the analysis considerably over that of the simple three-sector model. For example, adjustment policies usually contain elements of demand restraint, price policy, trade policy changes, reform of credit markets, improvements in parastatal performance, and institution-strengthening. If the focus is on gender, one might, at a minimum, want to focus on differences in individual characteristics covering production (labor market employment and household management), consumption (traded, non-traded and protected goods, plus public goods), reproduction (child birth and child rearing), and community organization (political and economic).

A crude policy/characteristic matrix would contain 6 x 12 cells, each telling a story about policy and impact. In addition, there are interactive effects to consider. Moreover, this assumes that governments can actually bring about the desired changes in real variables (real relative prices, real exchange rate) through the manipulation of nominal variables (money supply, nominal exchange rate), and that these changes in real

variables result in the required resource re-allocations. Hence, in any attempt to analyze the distributional effects of adjustment and stabilization, strong assumptions (flexible wages, full employment, strong supply responses) are usually made. For instance, Behrman (1989) states:

> Currency devaluation is usually a key component of adjustment programs...The increase in the prices of internationally traded goods relative to non-traded goods causes expenditure switching. Such shifts benefit the inputs used relatively intensively in traded-good production and the consumers (relatively) of nontraded goods under strong simplifying assumptions...Given these assumptions the implications for the income of the poor in a particular country, thus, depend on the factor intensity of production and the nature of consumption patterns...The more one moves away from the simplifying assumptions...the less strong are any predictions...If the formal-informal distinction is important, for example...and if factors are not completely mobile between the formal and informal sectors...there are no unambiguous predictions.

In a series of papers, Addison and Demery (1987, 1989, 1990) explore the consequences of adjustment, assuming imperfections in one of the meso-elements--the labor market--upon the distribution of income and the level of overall poverty. They use the standard "Australian" or "dependent-economy" model of international trade as a baseline from which to examine the distributive impact of labor market imperfections as departures from the orthodox. They summarize by stating that although the introduction of labor market imperfections makes a difference to the poverty effects of adjustment, it does little to remove the "awkward ambiguity found in the theory" and they conclude that "the policy debate needs to be better served by further empirical investigation."

On the empirical side, the SDA unit states: "A useful research methodology...would involve a combination of more formal modelling techniques to investigate macro-meso linkages, through which counterfactual-type experiments would be feasible with survey-based meso-micro analysis of household welfare."

This approach would be based on computable general equilibrium models (CGEs) specified within the organizing framework of a social accounting matrix (SAM). One of the most complete of the initial attempts to model macro-meso-micro linkages has been made by Sarris (1989). Whereas the tone in the 1990 SDA report is "top-down," e.g., "tracing these (macro) effects through to households," Sarris advocates a "bottom-up" approach, stating: "the functional identification of the poor as a first step will help center the debate on the impact of adjustment on only those aspects that are important from the perspective of the poor."

The stylized characteristics of sub-Saharan African countries that Sarris seeks to incorporate in his dynamic CGE are functional: what are their income sources, expenditure patterns, occupation, and access to resources? Specifically, his approach acknowledges that (i) the majority of the poor are found in rural areas, and that agriculture has to be given special attention in the modelling effort; (ii) the majority of the uroan poor are engaged in trade and service activities; and (iii) the poor make high use of informal parallel markets for goods, credit, and foreign exchange.

In seeking appropriate disaggregations, it is important to recognize that households are not homogenous in their composition. An improvement in household welfare does not necessarily translate into an equal or absolute improvement in individual welfare. It is true that Haddad and Kanbur (1990) found that the neglect

of intrahousehold calorie allocation resulted in few dramatic ranking differences across various household groupings in terms of their levels of calorie poverty and calorie inequality. However, this is not a sound footing on which to treat the household as if it were an undifferentiated unit and justify the curtailment of data collection for the analysis of the distributional impact of adjustment at the household level (World Bank, 1990).

In fact, Haddad and Kanbur (1989) demonstrate the theoretical consequences for intrahousehold inequality of a stereotypical relative price change associated with structural adjustment as mapped onto a plausible division of labor within the household. They assume a bargaining framework, with cooperation increasing the total value of household income, where the woman's "fall back" position (i.e., what she could earn were cooperation to break down) is the income derived from food crops, and the man's fall-back position is income earned from cash crops. Furthermore, they assume that the income from cash crops is greater than that from food crops, so that the male is the dominant bargainer.

Under these assumptions, it can be shown that if structural adjustment results in an increase in the price of traded goods (e.g., cocoa) relative to non-traded goods (e.g., cassava), then under either cooperative (Nash, 1950) or non-cooperative (Rubinstein, 1982) bargaining, this will lead to an increase in intrahousehold inequality. However, inequality does not increase at the expense of the disadvantaged member of the household; rather, both the male and female benefit from cooperation under structural adjustment, but the male benefits more than the female does.

D. Summary

In all this work there is a trade-off between realism and complexity in which the simple three-sector model and the giant general-equilibrium-plus-social-accounting-matrix represent opposite extremes. At issue is whether gender is an important dimension for disaggregation in order to capture essential features of the adjustment process. The usefulness of the three-sector model is that, even at this high level of aggregation, gender appears to play a potentially important role. Results for the more ambitious modelling exercises have not yet emerged. The challenge will be how effectively gender can be drawn into the analysis and how it is translated into policy design.

III. OVERVIEW OF CASE STUDIES

Each of the case studies uses a similar methodology. Following a brief description of the recent social and economic history, there is a section that outlines the gender patterns in the economic and social life of the country. This static picture covers education, the sectoral and occupational distribution of labor force participation, job mobility, unemployment, the distribution of income and consumption, and various legal and customary practices which govern the relations between the sexes and intra-family rights and obligations.

Next, there is a description of the adjustment problems the country has faced and the policy prescriptions followed. This discussion includes the external shocks, the cumulative pressures resulting from delayed or inappropriate responses, and the more comprehensive policy packages eventually implemented in collaboration with the World Bank and the International Monetary Fund (IMF).

There follows an attempt to combine the recent adjustment history with the information on the more persistent social and economic patterns to establish what role gender plays in the allocation of the burden of adjustment.

Finally, the case studies track the recent changes in output, employment, and social indicators to determine what gender patterns are emerging in the supply response and to identify what bottlenecks there are to the full participation of both sexes. This provides the basis for drawing conclusions about appropriate development aid initiatives.

A. Jamaica

Women's socioeconomic status makes Jamaica a distinctive case in several respects. Women's scholastic performance exceeds that of men. Women have higher overall enrollment rates, they have higher literacy rates, and they achieve higher scores in the Common Entrance Exams.

Another striking feature of the Jamaican case is the high labor force participation rate for women. In 1986 it was 64 percent for women and 78 percent for men. This contrasts sharply with other countries in the Latin American and Caribbean region. Only 2 of the 22 countries surveyed during the 1970s in the region had higher female participation rates. These were Guyana and Haiti, which are among the poorest countries in the world.

Jamaica has a very skewed distribution of income. In 1972 the bottom 10 percent of households earned about 2 percent of the income while the upper 10 percent earned about 33 percent of the income. Female-headed households are overrepresented in the lowest quintile--47 percent as opposed to 39 percent in the population as a whole, and are underrepresented in the highest quintile--32 percent as opposed to 39. However, in the middle ranges, the pattern is reversed so that women are underrepresented in the second lowest quintile and overrepresented in the second highest.

The data on the distribution of economic well-being reveal several things. First, there is a predominance of female-headed families among the very poor. Second, rural families are poorer than urban ones. In the rural areas, the poorest are the agricultural laborers with per capita consumption of only J$168 per month, which is far less than the average of J$344. In this group, 6.1 percent were male and 4.3 percent were female. Small

farmers also consume far less than average--J$183 per month. Here men are overwhelmingly dominant--33 percent relative to 12 percent. However, the poorest of all are domestic servants who consumed an average of J$157 per month. These are almost entirely women. Small traders are also relatively poor with per capita consumption of J$263. These are nearly all women and a large portion are in the urban areas. Following them are sales clerks with J$281, again a female-dominated category.

What emerges from these figures is that the poorest of the poor are women farmers, either laborers or small peasants. Among these, the female-headed households are probably worst off. However, this is a rather small category given the lower incidence of female-headed households in the rural areas and the smaller numbers of female farmers. Domestic servants are also among the poorest and of them the single mothers and their dependents are undoubtedly worse off. Women traders are somewhat better off but are still well below average. Non-domestic service workers have roughly average wages. In the middle-income ranges are occupations such as craftsmen and operatives that are more heavily dominated by men. Then there is an important group of upper middle-income women in lower professional secretarial and clerical jobs who earn significantly more than the average. This group accounts for roughly a fifth of all women. Their jobs are relatively concentrated in the public sector and represent an important conduit of upward mobility for women although one which is not directly accessible by women in the lower socioeconomic groups.

In terms of sectoral and occupational distribution of employment, there are three areas where women have a sharply higher level of activity than men. The first is self-employed persons in the commercial sector. This accounted for 13 percent of all working women but only 3 percent of working men. This group is largely the higglers. A good portion of these women are poor but there are also a few who are well-off.

The second area of relatively high female employment is service workers in the "other services" sector. These are employed (as opposed to self-employed) workers, the majority of whom are domestics. They account for 17 percent of working women and only 2 percent of working men. Again, this is a relatively low-income category of worker.

The third area is professional, technical, and administrative workers in the public sector which included 11 percent of working women and just 3 percent of working men. This group has historically been relatively well paid although there have been changes here during the last decade.

Women are underrepresented as self-employed farmers (13 percent of working women as compared with 37 percent of working men). This is a low-income category. It is interesting to note that among unskilled manual labor in the agricultural sector the male and female shares are the same: 8 percent. This relative parity holds for manual labor in the non-agricultural sectors as well. This is a very low-income category. Men have relatively higher concentration as operators in the manufacturing and construction sectors.

Despite these differences, the participation of women in Jamaican labor markets is very broad based. This reflects their relatively high level of job mobility. A study by Derek Gordon based on the 1984 National Mobility Survey indicates that women are 55 percent more mobile than men as measured by their relative propensity to move into occupations different from those of their parents.

Key occupations for upward mobility for women include nurses, teachers, clerks, and civil servants. These are largely public sector jobs. As a result, an economic recession restricts the mobility of women, but one in which public sector contraction leads the way is especially damaging to their prospects for economic advancement.

The labor force data reveal a clear and important pattern. Women, in larger numbers than men, left the non-seeking ranks and searched actively for work during the period from 1980 to 1985. Many of these women had no previous work experience and therefore were not classified according to sector or occupation.

1. Structural Adjustment

Jamaican fiscal deficits were excessive in the early to mid-1970s. Attempts to control them involved ever greater intervention and were only temporarily effective. This approach to deficit control was finally recognized as inappropriate in the early 1980s but spending was not effectively curbed until 1984/85, and revenue reforms were not made until even later. Through the latter part of the 1980s, the deficit shrunk as a share of GDP and Jamaica is now holding to IMF targets. Further efforts are needed, however, and it is disturbing that temporary measures such as privatizations and asset selloffs are relied on to cope with the deficit.

The exchange regime has been a chronic source of problems. The government has consistently resisted devaluation in the face of balance of payments (BOP) pressures. The result has been a generally overvalued currency that compromises exports, periodic exchange crises that create uncertainty, and high interest rates that discourage investment and increase the cost of public debt. Reform of the exchange system and associated changes in banking and financial markets remain key challenges for future adjustment policy.

Official lenders allowed Jamaica to run up large current account deficits in the early 1980s by providing loans that would not have come from the commercial banks. The result was a substantial increase in foreign debt and very little increase in the capacity to service debt. The debt load is now one of the highest in the world and one must question whether this was appropriate given the delays and the incomplete nature of the reforms that were implemented under the adjustment programs.

Jamaican agriculture has been in decline since the early 1960s with its contribution to GDP dropping from 17 percent to 8 percent by 1987. Recent progress in agriculture has been modest at best, despite the reforms. Agricultural GDP increased by only 6 percent between fiscal year (FY) 83 and FY87, and declined by 4 percent in FY88 due to hurricane Gilbert. The World Bank's three structural adjustment loans (SALs) were important in creating incentives. But conditionality and enforcement was weak. Agriculture has long been a neglected sector. The problems are therefore deep-rooted and will take time to turn around.

The bauxite industry at its peak provided 10,000 jobs and accounted for three fourths of merchandise exports and one third of government revenue. There have been poor policies regarding taxation of the industry which have had a detrimental effect, but the swings in international prices have been the main cause of problems. Two sharp drops in prices took place during the early 1980s, adding to the problems of excessive debt and rising oil prices.

In contrast to bauxite and tourism, which are leading sectors in Jamaica, manufacturing has been a following sector. Manufacturing output peaked in the early 1970s along with GDP and has declined in close parallel with it since. In part, this reflects the inward-focused and import-substituting nature of the sector. The

relatively low labor intensity and the high levels of protection combined to produce inefficient industries. A surge in manufactured output is one of the key indices of economic growth common to the Newly Industrialized Countries (NICs) such as Korea and Taiwan and other emerging countries. The shrinkage of the Jamaican manufacturing sector is perhaps the best indication of the failure of policies over the last two decades.

The apparel subsector is the main success story in the manufacturing sector. Exports grew from US$14 million in 1983 to over US$100 million by 1987. This sector benefitted from the reforms which were implemented, and the preferential access to the U.S. market allowed by the Caribbean Basin Initiative has also been a major factor. Performance elsewhere in the sector has been disappointing. Funds for investment have been a chronic problem in the 1980s. Foreign investment has been weak because of the currency and trade regulations. Domestic investment has been hampered by the high interest rates and by "crowding out" resulting from the need to finance the government deficit.

There are other potential areas for manufacturing growth like that of the garment industry. These include footwear, furniture, electronics, and data entry. There is considerable potential for deepening value added in manufacturing in agro-industrial businesses, but these will require more substantial reform in agriculture. Currently the sector has obsolete equipment and low rates of capacity utilization.

2. Gender and Adjustment

The following points broadly characterize the early adjustment period.

1. In 1980 real GDP per capita dropped by over one fourth from its peak in 1972. It recovered slightly over the next three years and then contracted by a further 8 percent over 1984 and 1985. It has risen thereafter. Real consumption expenditure shows a similar pattern.

2. The first reform effort in 1977 under the IMF was stillborn. The second agreement also fell apart within a year. However, there were devaluations and sharp reductions in real wages in 1978 and 1979 which contributed to the abrogation of the agreement.

3. Unemployment peaked in 1980 with a subsequent lesser peak in 1982. It has declined without interruption since then. This was true for both male and female rates.

4. Although declining through the 1970s, the level of social spending and the indicators of social well-being were both higher than those of many countries with similar per capita incomes.

5. Real per capita government expenditures on the five main categories of social spending (education, health, social security, housing, and water) peaked in 1979-80. They remained slightly below peak until 1983 when they were reduced by 20 percent. They fell by a further 20 percent the following year.

There is a sense that women have suffered more during the economic contraction and that this is due to two main factors. First, they are more vulnerable to begin with. Second, they are relatively more dependent on public services and public sector employment than men, and the public sector sustained very sharp cuts.

In terms of health care, women have a relatively greater dependence on the system because of their role in childbearing and child rearing. Female-headed households are poorer on average and therefore do not have as ready access to the large private health care system. Moreover, women are much more heavily employed by the public health care system than are men.

Nutrition standards appear to have deteriorated during the adjustment period, but the government's programs have had an important softening effect. The initiatives under the Social Well-Being Program (SWP) have provided important further improvements. The main future constraints are likely to be in the government's ability to plan and manage the program.

As in the case of health, the higher incidence of poverty and the relatively greater responsibility for child rearing makes women relatively more dependent on public efforts to sustain levels of nutrition. Unlike the health care system, however, nutrition programs were initiated and enhanced through the period of greatest restraint. Furthermore, they have been better focused on poorer women and women with young children. Over 50 percent of those in the lowest quintile received food stamps as opposed to 6 percent in the highest, and 72 percent of pregnant and lactating females in the lowest quintile received them as opposed to 4 percent in the highest.

Education follows very much the same pattern as health. Jamaica had a good system that has been allowed to deteriorate over time. Currently, 80 percent of children complete primary school as compared with 95 percent in similar developing countries, and enrollment in higher education is only half that of the other countries. Moreover, the quality of education as measured in standardized tests lags significantly at primary and secondary levels. Although the situation may have worsened in 1984-85, the problems are long-standing ones.

Education is a relatively important factor for women in securing employment in better paying jobs in the public sector and as clerks and secretaries. Women also make up the vast majority of teachers. From this perspective, they have suffered more than proportionately, not only in terms of salaries which had been declining for some years, but also in terms of work loads and working conditions.

The data on wages offer some support for the view that women suffered more. Following the initial currency devaluations, real wages dropped by 20 percent for men and by 25 percent for women.

In terms of employment, however, women gained more than men. Between 1980 and 1987 there were 25 percent more jobs for women as opposed to 21 percent for men. Between 1982 and 1987 the difference is even more marked--19 percent for women as compared with 12 percent for men. However, the relative employment gains of women are not all that dramatic. Women's share of total employment has climbed slowly from 38 percent in 1975 to 40 percent in 1987.

The higher growth in employment for women is attributable to the relatively faster growth of "female intensive" sectors rather than increasing proportions of female employees within individual sectors. In fact, the male-female shares are very steady over time within sectors and within occupational classes.

The unemployment rates for men and women both peaked in 1982 and have declined since. Women's unemployment rate dropped from 41 percent in 1982 to 30 percent in 1987, while the men's rate declined less sharply from 16 percent to 13 percent. Women also joined the labor force relatively faster than men. The female labor force participation rate rose steadily from 60 percent in the mid-1980s to a peak of 66 percent in 1981. It peaked again in 1984. This counter-cyclical shifting into the labor force during recession and out again during recovery suggests that women were trying to compensate for lower family incomes. Men's labor force participation, by contrast, shows a very gradual decline through the whole period.

The conclusion to be drawn from these data is that during the height of the restraint period, women entered the labor force in larger numbers than men probably to compensate for losses in family income. In addition, there was a shift in the numbers of passive unemployed women to active seekers. Women turned to service sector jobs like domestic service and higgling to earn extra income during the recession.

Once one removes these transitional shifts from the data, one sees that, relative to men, women are becoming more concentrated in the public service and in manufacturing and are moving out of agriculture. These shifts are consistent with the patterns that are expected to emerge as the long-run consequences of structural reform. However, there are several important qualifications.

First, all the changes are small. Relative growth rates of different sectors seem to be the most important factor in creating the modest increase in overall female employment. With the exception of manufacturing, there is no tendency for increased female employment within individual sectors. However, the stability of male-female ratios within sectoral and occupational groups could break down under higher growth and levels of labor demand. Women are present in significant numbers (over 20 percent) in all sectors except construction and mining. Barriers to female entry are not that great. The potential mobility of women between sectors and occupations suggests that even if "male" sectors were to enjoy relative expansion, the employment opportunities would not necessarily accrue disproportionately to men.

In the longer term as the supply response matures, it is likely that export crops will be favored and the domestic crop producers will be squeezed. There will be a general tendency for production to switch away from yams and beans toward bananas, citrus, sugar, and cut flowers. Some smallholders may become plantation workers or shift more heavily into those export crops that can be grown on small plots.

It is difficult to build a case that these changes will display marked gender differential patterns. Exactly the same portion of employed women (8 percent) are farm laborers as men. Women are in a minority as smallholders and it is possible that among smallholders women may currently produce more of the domestic crops, but there are no firm data to support this claim. Even if there were, the production effects are far from certain. The general assumption is that reform of the trade and exchange regimes will induce a shift from domestic supply to exports. But Jamaica may lose its preferential access to protected banana markets in Europe after 1992 and Jamaica is not among the lowest cost producers. International sugar markets are highly distorted and citrus may not remain competitive with other international suppliers. Moreover, the reduced protection for domestic food crops brought about by changes to tariffs and quotas will be offset by the effects of a lower exchange rate.

What is probably most important here is not the shift in crop composition induced by reforms, but the overall performance of the agricultural sector in which women are underrepresented relative to sectors in which women are dominant. If the long-term decline of the agricultural sector is reversed as a result of the reforms,

men might benefit more by virtue of their relatively higher participation in the sector, but this is by no means a certainty. Moreover, agriculture sector earnings are among the lowest of any sector which would make the men's relative gains in this sector less important overall.

One might argue that reductions in production of crops for the domestic market will cut into the traditional trading activities of women. This argument is hard to sustain. Women are already very active as traders of imported goods. In the long run, liberalized trade and foreign exchange rules are likely to increase the volume of trade and open up greater opportunities for those with commercial experience. There may be a tendency toward increased formalization of commercial activities. It is unlikely that this will mean women get squeezed out of commercial activities since they have such a strong position in the markets now. In any event, the demands of debt service will dampen the growth of import trade in the medium term so women should have time to adapt.

The public sector has suffered a long-term decline which has been particularly hard on women since they are overrepresented in the sector and have traditionally had relatively higher earnings in this sector than in others. But over time, the wage rates have fallen and the fiscal restraint as part of the adjustment program has meant a sharp contraction of the sector. In the long run, employment opportunities for women in this sector will be re-established as the fiscal situation improves, and wage rates will rise. This is happening already to some degree, but it is clear that the size of the external public debt will continue to limit the scope for public sector growth for some time.

Export-oriented manufacturing offers the promise of increased job opportunities for women as has already been demonstrated in the garment industry. This will tend to benefit younger women without dependents although the jobs have relatively low wage rates. The proximity to the U.S. market is a strong plus for Jamaica although a Mexico-U.S. trade deal could have a dampening effect here.

On balance then, it seems that women are not likely to lose from adjustment in the longer run and they can potentially gain even more than men. Conditions in the depressed public sector where there are relatively more women can only improve with time. New jobs in export processing industries will be more than proportionately taken up by women. Trade and commercial activity will likely expand with liberalization generating relatively greater benefits for women. Agriculture may suffer, but it is male dominated.

Beyond all these inter- and intra-sectoral shifts, however, the main key to the improvement of women's position is greater general economic growth. Female unemployment rates are higher than male rates. During the adjustment period, women's job search rates have shot well ahead of men's. They need jobs, and within fairly broad limits they are mobile enough to relocate wherever new opportunities open up. If structural adjustment can set the stage for renewed growth, then women will benefit. Clearly, some of the new job creation will be at the low end of the salary scale. But if the growth is effective in lowering unemployment rates generally, women will gain, and they have more to gain than men because it is among poor unemployed and underemployed single women with dependents that the greatest hardship occurs now.

B. Pakistan

On most socioeconomic indicators, the welfare of women in Pakistan is among the lowest in the world. A large majority of Pakistani women are subject to and comply with cultural traditions encouraging the practice of purdah (female seclusion). This practice limits women's economic participation to a narrow range of activities

considered to be "respectable." Nonetheless, women contribute importantly to the country's economic life. Women in low-income rural households are full participants in family farming ventures, albeit with little voice in decision-making or control over resources. Purdah is more common in better-off rural areas, upper-income agrarian families, and middle-income urban households. In urban areas, there is a small but expanding corps of women in professions, notably teaching and medicine. Home-based work--such as stitching and food processing--is probably the most important income-generating activity for urban women. It satisfies concerns about respectability though pay is extremely low. Young women are increasingly involved in unskilled wage labor in factories.

Pakistan's adjustment experience is unusual in that the initial phase emphasized liberalization and structural reforms; it faced no stabilization problem until the late 1980s. Effects of adjustment on women are hard to discern. This is because the adjustment program has not been dramatic, because women's welfare and economic involvement are so intertwined with their households, and because cultural norms place such strong constraints on women's labor mobility. With few exceptions, women do not own productive resources, cannot obtain credit, can gain information about and access to extra-household economic life only through male family members, and can only work in a narrow range of activities. Thus, to the extent that women are directly involved in supply response, the forms of their involvement must conform to dictates governing socially and morally appropriate behavior. This means the main effects of adjustment on women are indirect, insofar as it creates employment opportunities for male family members and increases households' real incomes.

1. Structural Adjustment

Pakistan's fiscal deficit grew steadily in the 1980s due to escalating military spending and transfers to the provinces. In 1988 the fiscal deficit reached 8.6 percent of gross national product (GNP). Debt management problems and the government's heavy borrowing needs were beginning to undermine domestic financial stability. In addition, the current account deteriorated markedly, due to a surge in imports, declining remittances from workers in the Middle East, and an adverse shift in the terms of trade. In December 1988, Pakistan launched an adjustment program intended to restore macroeconomic balance by 1992.

In countries undergoing stabilization, intensified labor force participation by women is a common response to declining real incomes. But in Pakistan, women's ability to intensify income-generating activities is seriously constrained. The activities to which they can turn are limited and very poorly paid. In most types of home-based work, pay is so low that even if women could significantly increase the amount of work they take in, the increase in earnings would be very small. Any significant increase in the supply of women seeking paid home-based work may exert further downward pressure on pay levels. Nonetheless, the range of activities in which women are found has been expanding over time, albeit slowly. This has in turn broadened the definition of what is considered respectable. The need to seek paid work in response to stabilization-related slowdown may thus serve to continue the gradual movement of women into the paid labor force.

Many elements of the 1989-92 adjustment program affect women only indirectly. For example, financial reforms will have very little direct effect on women since women are generally excluded from access to credit. Jobs created through investments financed by private banks are likely to accrue disproportionately to men. Restraining real growth of civil servants' salaries increases pressures on middle class women to stretch scarce household resources. Slower growth of public employment may limit the already slow movement of women into low-level white collar jobs like post office clerks. But generally, the effects on women are indirect and mediated through the relative income position of the household.

The adjustment program contains provisions for maintaining expenditure growth in education and health care. If the government is able to maintain its investment in education and health care, employment opportunities may open up for women. This depends upon how much attention is given to providing education and health care specifically for girls and women. Girls cannot be taught in integrated schools or by male teachers after puberty, and cultural norms constrain women from being examined by male doctors. There is thus considerable leeway for job creation for women teachers and health care professionals. Two major constraints exist. First, the supply of educated women for these positions is limited by low female school enrollment and retention rates. Second, cultural norms interfere with women's ability to work not only because of the lack of respectable work arrangements (i.e., segregation) but also because of the lack of respectable means of transportation and housing. However, if the government emphasizes the education of girls and the respectability of the teaching profession for women, the long-term effects may be dramatic as more girls not only complete school, but also have female role models outside of the household setting. The long-term effects of increased female employment in the health professions may also be dramatic in terms of women's health, mortality rates, and the health and well-being of their children and families.

2. Gender and Adjustment

Effects of agricultural policy changes are particularly difficult to assess. This is in part because input subsidies were lifted while output prices were raised, with ambiguous effects on farm profitability. Thus, measures of agricultural incentives show no clear trend. At the same time, the position of women in rural production systems varies widely from region to region and between different classes. Consequently, changes which have taken place have been quite diverse. Scenarios include increased demands on women's time in poorer rainfed areas, withdrawal into purdah where the Green Revolution has increased household incomes, and little appreciable change in poor rural communities where prime-age men had left for jobs in the army, the Gulf, or Britain. To date, employment effects of trade liberalization have not been dramatic. But continued expansion and improvement of the country's productive capacity should draw labor into higher productivity activities, thus increasing real incomes. Again, the main impact of trade liberalization on women is likely to be indirect. The bulk of newly-created jobs have gone, and will probably continue to go, to men. To the extent that job opportunities for women open up, they tend to be in activities specifically designated as "women's work," where employers provide segregated work areas, separate sanitary facilities, and possibly female supervisors or "respectable" ways to commute.

Such activities generally involve low productivity, repetitive tasks requiring little equipment, training, or education. For example, all-female workshops grew up alongside the rapidly-expanding ready-made garment industry. These workshops -- which may be either divisions of firms or separate sub-contractors -- perform such tasks as thread-cutting, embroidery, and button-stitching. Increased production for export may also create some opportunities for home-based work. But this is likely to be confined to marginal, low-productivity tasks like packing since factory conditions are generally required to achieve the standardization and product quality needed for competitiveness in export markets. Whether based inside or outside the home, most export-related work opportunities for women will probably continue to involve very low pay and little chance for skill acquisition or occupational advancement.

Quantitatively, the most important benefits to women from trade liberalization may be indirect, insofar as creation of productive employment for men raises household incomes. Traditionally, with rising real incomes, women are apt to withdraw from the labor market. There is some debate as to whether this tendency has been gradually weakening over time, at least in urban areas. On one hand, some argue that the cultural ideal of

keeping women out of paid work has become increasingly unattainable due to urbanization, weakening of traditional extended family networks, and the general monetization of production and consumption. On the other hand, some observers suggest that the increase in women's labor force participation has expanded the range of options available to them, so that purdah is no longer the only chosen path for all but the tiny educated elite. In any event, changes in the role of women in Pakistani society and economy are the result of complex, longer-term processes. While trade liberalization may contribute to these processes, its effect is ambiguous and by itself probably not of major importance.

C. Ghana and Côte d'Ivoire

From a historical perspective, the different economic fortunes that would be associated with the different political paths chosen by Ghana and Côte d'Ivoire in the late 1950s was the subject of a wager between their respective leaders, Kwame Nkrumah and Félix Houphouet-Boigny in 1957. In the twenty years that followed, Ghana went from being one of the richest West African countries to being one of the poorest, while Côte d'Ivoire's "economic miracle" resulted in a lower middle-income ranking. Côte d'Ivoire's cooperative arrangement with France was certainly one of the main reasons for its flexible stability, but Ghana's economic mismanagement in the early 1960s was equally important in creating the contrast. Frequent changes in government, shifts in policy, and severe reductions in the standard of living for the majority of the population were the consequences.

From a longer-term gender perspective, colonialization, urbanization, and deforestation have placed differentially heavy burdens on women (need to raise food production, less access to education, heavier time burdens).

1. Structural Adjustment

Adjustment was initiated in Ghana in 1983 and in Côte d'Ivoire in 1981. The economic experience of Ghana in the 1978-87 period has been much more volatile than in Côte d'Ivoire. Much of the Ivorian stability has emanated from its membership in the West African Monetary Union (WAMU)--Union Monétaire Ouest Africaine (UMOA). For instance, Ivorian trade liberalization could occur much more quickly than in Ghana due to the convertible nature of the CFA franc. Membership also required tightness in fiscal policy which led to wage and hiring freezes in Côte d'Ivoire as opposed to the retrenchment of public sector employees that took place in Ghana. Attention to non-price incentives for cocoa and coffee production also contributed to Côte d'Ivoire's superior ability to weather the storms of economic crisis and stabilization. Beverage crop growers in Ghana suffered more around the time of the stabilization process than growers in Côte d'Ivoire, and although Ghanaian real producer prices rose in the late 1980s while Ivorian ones did not, cocoa farmers in Côte d'Ivoire currently still receive a much greater proportion of the world price than do their Ghanaian counterparts. Finally, it is reasoned that food is both a non-tradable good and an unprotected import-substitute for both Ghana and Côte d'Ivoire, implying that female labor mobility and access to new resources in existing sectors is likely to be important for successful adjustment.

2. Gender and Adjustment

Any change in the macroeconomic environment will result in burdens that are heavier for, and less easily borne by some groups of individuals than others, while new opportunities will be seized by those who can most quickly re-mobilize their own labor and obtain access to other productive resources. Abilities to cope and thrive

will be conditioned by constraints on time, health, educational attainment, land rights, credit, and information use. An underpinning set of social norms delineates rights, activities, responsibilities, hierarchies, and roles. An ability (inability) to thrive will facilitate (impede) adjustment and an inability to cope may lead to levels of social friction that are incompatible with the conduct of successful economic policy.

There are no outstanding differences in welfare by gender or gender of family head for either Ghana or Côte d'Ivoire. For some measures of welfare, female-headed households seem poorer than male-headed households (food budget share in Ghana, total per capita household expenditure in Côte d'Ivoire), but for others there seems to be little difference in living standards across the gender (anthropometric measures, non-food expenditures, total household expenditures, the $P\alpha$ index). Clearly, more work has to be done in this area, for Côte d'Ivoire in particular, but for available indicators of welfare there does not seem to be a strong gender bias in Côte d'Ivoire or Ghana.

Education is perhaps the most visible gender-differentiating process in both Côte d'Ivoire and Ghana, and this has serious consequences for female sectoral location and resource mobility. In terms of educational achievement, females part company with males at the ages of 10-14. Another way of looking at role-model formation is through respondent-parent data. Although respondent-parent occupational patterns from Ghana are intriguing, and provide food for thought, the analysis as it stands finds little firm evidence for occupational "fixity" differences across gender.

Asymmetric rights and obligations are examined in terms of decision-making, time burdens, and reproduction. Decision-making and income control within the household varies by region in both Ghana and Côte d'Ivoire. In the more northern regions, where both husband and wife are present, it is more likely that there will be no exclusively female decision-making activities, except for trading. However, evidence from Côte d'Ivoire suggests that income is <u>not</u> pooled because the percentage of income from women's crops affects household expenditure patterns, even when the level of household income is controlled for.

Time burdens are heavier for women than for men in Ghana (also reported in Côte d'Ivoire). Small reductions in time spent in work outside the home fail to compensate for large disparities in the allocation of time for household duties. High levels of fertility are desired in both Ghana and Côte d'Ivoire. These levels decline with education, and increase with income levels. Some support for the existence of a maternal depletion syndrome at high levels of fertility is found in Ghana.

The lack of solid data on the gender breakdown of sectoral location in Côte d'Ivoire severely hampers this section. The data for Ghana are not in this ideal form either. Nonetheless, we can say that women accounted for 27 percent of the government work force in Ghana in 1987 with the suggestion that these women tend to be below the age of 45. The residual non-traded employment sector in Ghana also has a low female representation over the age of 45. Ghanaian manufacturing recruits a solid one third (across all age groups) of its labor force from the female ranks. About half of Ghana's primary-occupation agriculturalists are women. Many female-headed households grow traditionally male crops; this undoubtedly has something to do with the way they became female-headed (e.g., widowed), and it is a factor that should not be ignored by Ghanaian agriculture policy-makers.

For both countries there is little wage discrimination against women in the formal wage market; if anything, they are paid a premium for their labor. This suggests that male and female labor is not particularly substitutable, and is <u>not</u> encouraging from the point of view of successful adjustment. Furthermore, education

is a key factor enabling entry into the formal labor markets in both countries, and females are relatively unsuccessful in their attempts to attain the necessary education levels. In rural Côte d'Ivoire there seems to be little gender difference in the ability of young people to respond to agricultural price incentives, although boys are more likely to do so while pursuing their education.

In terms of access to resources other than their own labor, women's land rights are more vague than men's, their use (if not access to) of credit is less than men's, and they receive less help from government agricultural extension workers than do men. In terms of export-cropping, it is too early yet to assess the extent to which it is new investment or simply a retracing of old steps that is responsible for improved output in both Ghana and Côte d'Ivoire. The signs are encouraging in that Ghanaian female-headed households are improving cocoa production through the rehabilitation of existing trees. We do not know if those Ghanaian households which have only young tree crops are new growers, or simply had a tradition of tree-crop growing, but have left their crops unattended for more than the lifetime of the tree.

The evidence suggests that in Ghana and Côte d'Ivoire the gender-mediated constraints that can put a brake on adjustment are strong. It is too early yet to determine the extent to which they will act as a brake although the signs are not auspicious. If women's roles are undervalued pre-adjustment (as suggested by lower educational attainment and heavier time burdens), then a gender-neutral position during adjustment will surely increase the pressure on that brake. And this is a fairly optimistic scenario, for there is a large ethnographic literature on Ghana and Côte d'Ivoire that documents the marginalization of women farmers in the course of agricultural commercialization that has occurred in the not so distant past.

As far as the Ghanaian government is concerned, the policy response seems to embrace the gender-neutral end of the spectrum of options. The Ghanaian Programme of Actions to Alleviate the Social Costs of Adjustment (PAMSCAD) includes projects designed to generate employment, facilitate the delivery of basic needs, improve access to education and credit, and rehabilitate community infrastructure. The cost estimate attached to the existing PAMSCAD initiative to "Enhance the Economic Opportunities for Women in Development" (Government of Ghana 1987) is relatively small compared to other project initiatives.

Whether gender-blind approaches are gender-neutral or further reinforce the gender-differential status quo, and whether true gender-neutrality is the most efficient way of improving productivity, are matters for detailed intervention evaluations. Either way, however, it is clear that female illiteracy has a high opportunity cost (a small relaxation of this constraint would at least allow the individual to provide the signature required to secure credit). Education reform, in terms of relaxing the constraints that exclude women from all levels of schooling, should be at the heart of any attempt to invigorate the supply-side response of the Ghanaian and Ivorian economies.

IV. LESSONS FOR DONORS

Targeting is a key issue if donors perceive a need to counteract a relatively larger negative impact of structural adjustment on women in the short to medium term. Targeted measures are of two sorts. The first consists of the direct provision of goods and services that are of relatively greater benefit to women. The food stamps program in Jamaica seems to have been particularly valuable in this regard. Efforts to sustain health and education standards through the initial contractionary phases of adjustment are often more difficult. These are areas which may require more sustained reconstruction efforts and in which improvements are limited by internal planning and administrative capacities of local government. To be effective in the short term, donors must be prepared to provide the services directly themselves or through international nongovernment organization (NGO) groups, and cannot rely on local staff and resources.

The second set of measures consists of those that will increase women's income-earning potential. Employment schemes directed at improving infrastructure to facilitate economic recovery often involve construction activities that are bigger employers of men than women, although they can serve to reduce, indirectly, some of the pressure on women to join the labor force. In general, careful attention must be paid to the sectoral and occupational distribution of employment by gender if one wants to selectively enhance women's income-earning capacity. In agriculture, for instance, the majority of landowners are frequently men. They are most likely to benefit from the fertilizer credit and extension programs which are the usual instruments aid agencies use to reach farmers. Moreover, the larger farmers tend to benefit most and these are much more likely to be men. Even if women have a higher share of employment among farm laborers than they do among farm operators, it is very difficult for aid agencies to affect the earnings potential of this group without going through the employers who are men. There may be some basis for selectively targeting women by focusing on particular crops. But the division into male farming activities and female farming activities is not as sharp in some countries (Jamaica) as it is in, say, sub-Saharan Africa. The only way to be certain of reaching women is to make the programs exclusively for women and even then there can be intra-family offsets.

In trying to create employment, it is important to recognize that in many countries there is a high concentration of women in informal sector activities such as higgling and domestic service. Moreover, these groups account for a large share of the increase in female unemployment during the contractionary periods. This is a particularly hard group to reach in terms of job creation since they have low skill levels, often having no previous employment and may be limited by child-rearing responsibilities. Nonetheless, effective programs must take into account the concentration of need in this area.

The argument that structural adjustment will benefit women by causing a relative expansion in sectors which employ a high proportion of females is weak. To the extent that such benefits do emerge, they tend to be longer term and do not effectively offset the more immediate costs of adjustment. Furthermore, the sectors in which women have relatively greater participation are not on average higher wage sectors and this limits the income redistributive effects from expansion in these sectors.

In many countries, women have higher rates of unemployment and higher job search rates than men, especially during the initial phases of adjustment. Among them is a key group of unemployed women with children who suffer a high incidence of absolute poverty. Alleviation of problems for this group has more to do with a general rekindling of growth than with a reweighing of sectoral priorities.

Structural adjustment can help re-establish growth, and donors support it largely for this reason. However, the programs themselves must be well-conceived and the donor's support must mesh properly with them. Complex cross-conditionality schemes are not generally a good idea. Since the mid-1980s, the United States can no longer formally link its aid to the conditions of IMF and World Bank loans. A.I.D. is expanding its program lending, and this involves creating separate conditions. The thing to avoid is creating macroeconomic or other policy conditions that will, if abrogated, immediately choke off local funding for employment programs or social sector projects of direct benefit to women. The local cost component of such projects can be high, and it may seem like good sense to use counterpart funds generated by program aid to finance them. The principle that should be observed is that for a given BOP support measure, the donor should ask for either policy reforms or counterpart funds but not both. Otherwise, there is a risk of either a wasteful marooning of good projects in order to maintain respect for conditionality, or there is a watering down of conditionality. A.I.D. can have both policy conditions and counterpart funds in a given country, just not in the same program aid package.

The time lag between the restraint and the rekindling of growth is obviously critical to women as well as other vulnerable groups. The record here has not been good. Jamaica and Ghana illustrate the two types of problems. In one, the reforms were implemented by half measures with costly delays. In the other, the reforms failed to produce growth on the scale or in the time anticipated. Given these uncertainties, and given the renewed emphasis that A.I.D. is giving to program aid, it is important that effective indicators be developed to assist in the design and management of aid during adjustment.

In terms of gender issues, there are two things the indicators should do. First, they should clearly delineate where the preadjustment concentrations of poverty are. This means disaggregating by all relevant variables, including gender. It is critically important that the numbers be supported by analysis that links the distribution of income and wealth and the incidence of poverty to socioeconomic and political structures. Naked indicators tell one nothing about appropriate policies unless they are embedded in an analytical framework.

Second, the indicators must be tracked over the course of adjustment to identify problem areas as they emerge. The limited and delayed supply response in most adjusting countries has been a major theme in this paper. The problems here have included the incompleteness of reforms, unexpected changes in external factors such as commodity prices and interest rates, and the burden of foreign debt. Only if there are well-established indicators maintained on a reasonably current basis can problems of this sort be identified and appropriate mid-course corrections made.

CASE STUDY 1: JAMAICA

I. WOMEN IN THE SOCIAL AND HISTORICAL CONTEXT

The current social conditions in Jamaica have roots that run back to the period of British plantation slavery. Urban and rural patterns that persist today were established as far back as the 1700s. On the plantations there was little to distinguish male and female roles. Slaves were assigned field work according to age and physical condition, but not sex. Certain positions such as drivers and artisans were considered male jobs while domestic tasks were given to women, but these accounted for a small minority of the slave population and generally slave labor had few gender-specific characteristics.

Urban patterns were different. Female slaves were engaged in domestic jobs such as cooks, wet nurses, maids, washerwomen, nannies, servants, and market traders. Men were employed as coopers, caulkers, bakers, carpenters, masons, butchers, silversmiths, brickmakers, and wharf slaves (Simmonds).

A. The Rural Sector

Land use patterns are the unifying thread that runs through the history of rural Jamaica. Broadly speaking, there are two types of land: the coastal plains and river valleys; and the hillside or mountainous regions. There are four types of land use: large-scale plantation agriculture which includes sugar and citrus grown on the plains; medium-scale livestock ranching or pen-keeping done on the hillsides; small-scale peasant food cropping done on the hillsides; and bauxite mining also in the hill country. The three competing land uses in the hill country have driven the changes in the patterns of settlement and production. The coastal plantations have experienced booms and busts, but tenure patterns and land uses there have not changed significantly for 150 years.

The early plantations frequently included a fringe of hill country which slaves were allowed to keep as "provision ground" on which they cultivated subsistence crops and produce for the Sunday markets. This extra cash enabled some slaves to save money to purchase freedom or to buy land, but these were relatively few. Even after emancipation in 1838, the introduction of East Indian labor kept plantation wages low and there was little scope for the accumulation of savings. The establishment of independent small holdings was therefore slow and was further hindered by direct restrictions on the sale of land and a number of repressive measures on squatting and vagrancy.

The smallholders, landless peasants, and the plantation workers who formed the majority of the population were very poor. Their appetite for land was kept unfulfilled by the colonial administration which strove to ensure sources of cheap labor for the plantations. During the periodic depressions in the sugar industry, workers lost jobs and wages. With no access to land, they suffered serious hardship. There were recurring rebellions and waves of migration to the urban areas and abroad.

By degrees the colonial government was forced to ease restrictions. Over the course of the 100 years following emancipation, there eventually emerged a sizeable peasant smallholder class in the hill country. Some of the crops grown on these lands were considered unimportant by the white plantation owners but ultimately contributed significantly to export earnings. These included bananas, coffee, logwood, pimentos, and ginger.

By 1943 there were over 116,000 peasant smallholders, almost as many as the number of plantation workers. While they accounted for 71 percent of all farmers, they occupied only 8.5 percent of the land, much of it of lower quality than the plantation land. Among the freed slaves and coloreds, there were some who did manage to accumulate medium-sized hill country plots which were used for grazing livestock. Nevertheless, the pen-keeping plots and the plantation land were underutilized despite the shortage of land for peasant farmers.

In the 1950s the bauxite companies began buying hill country land at a rapid pace. At first they bought the larger pen-keeping lots. They made more effective use of this land than the previous owners, although not necessarily the most effective use possible. Large herds of cattle and other livestock were raised using more modern husbandry methods, and a growing dairy industry was established.

By the 1950s, however, most of the pen-keeping lots had been bought up and the companies had to buy and consolidate small holdings in order to assure an economic scale of future bauxite production. This heightened the rural exodus. In the early 1950s both the United States and the United Kingdom sharply tightened the immigration of Jamaicans, deflecting the stream of rural migrants toward Kingston and other urban areas. In addition, the flow of remittances for the purchase of land was reduced and land prices were pushed up by the bauxite companies. Once mined, the hill country land was much less productive and the effective supply of land shrank.

Offsetting this was the fact that the companies acquired land well in advance of its anticipated use and allowed some peasants to remain as tenants. However, the short-term nature of the tenancy agreements caused a shift away from tree crops such as bananas and citrus toward cultivation of annual food crops such as yams, sweet potatoes, Irish potatoes, corn, peas and beans. Some companies actually forbade the planting of perennials on tenant land. The net effects of the purchase of bauxite lands from the smallholders were a decrease in farm production, a shift from tree crops to annuals, and a large-scale emigration of peasants from the rural community overseas and, increasingly, as this outlet was tightened, to the urban areas.

B. The Urban Sector

The west African Yoruba tribe, from which many African Jamaicans are descended, have a matriarchal society. Kinship patterns and land transfers between generations follow the female line and commercial trading activities are dominated by women. These patterns were reinforced in some respects during the colonial period and were disrupted in others. Under the British system, land ownership was patrilineal. The property rights of Jamaican women were compromised by the refusal of the colonial authorities to recognize the union status of freed slaves as legal marriage. Legal marriage status therefore eluded the majority of African women in Jamaica. Even legally married women, who by 1944 received the right to vote, had no claim on joint property except to the extent that they had contributed cash. The value of unpaid labor of women therefore was the husband's property. These disruptions of traditional African practices clearly worked to the disadvantage of women.

The role of African women as traders and commercial entrepreneurs, however, was strengthened in Jamaica. The food produced on the "provision grounds" passed through a chain of traders to the local and urban Sunday markets. The rural division of labor between men and women, in contrast to the African practice, was probably relatively even, and the men may often have been the principle cultivators. Trading, however, was almost completely in the hands of women, especially in the urban centers. Women slaves and slave owners formed the majority of the urban population, and the majority of the slaves were African rather than creole.

The traditional trading abilities of the African women were put to good use by their owners. Under a variety of arrangements, slaves rendered a share of the trading profits to their masters and paid for their own upkeep. Some of the masters were creoles who would provide goods to the slaves to sell in the local markets. In other cases, the slaves themselves would barter for goods to take to market. These traders would routinely make long trips into the rural areas to collect goods for the urban markets using cash or trading goods imported through the ports. The slaves were generally given a wide degree of independence in the handling of goods and cash which prepared them well for work in voluntary arrangements or on their own account after emancipation.

Although these trading activities became an integral part of the urban economic system, they gave rise to a number of tensions. Even before emancipation, the female traders or higglers were not always slaves and, in fact, higgling was a common means of support for runaway slaves. There was considerable traffic in stolen goods. White and creole merchants who paid taxes felt commercially threatened by higglers who did not. The profitability of higgling pushed up the price of slaves and later of hired labor in urban centers so servants and washerwomen became expensive. Townspeople complained of monopoly pricing by the higglers. The itinerant higglers themselves were easy prey for thieves on the rural highways and coastal waters. As a result, there were repeated attempts to regulate and control higgling with severe punishments for offenders.

Migration has long served as an escape for land-starved Jamaican peasants. Cuba (sugar workers), Panama (canal construction), and the United Kingdom were common destinations from which remittances were sent back to purchase land. This pattern in which women remain on the farm while men migrate is similar to that in other developing countries. It tends to weaken family bonds and leaves the women with the responsibility for child rearing and farm work and gives them little control over remittances or land title. In Jamaica, emigration tends to be higher among the men with the result that women form a majority in the overall population. This majority is concentrated in the urban areas. Of the women in the Kingston area in 1970, 47 percent were born in another province. Among men, the figure was only 38 percent. This pattern is similar to that in other Caribbean and Latin American countries, but is more accentuated in Jamaica.

II. CURRENT ECONOMIC AND SOCIAL GENDER PATTERNS

A. Education

Women's scholastic performance exceeds that of men in almost all respects in Jamaica. They have higher overall enrollment rates, they have higher literacy rates, and they achieve higher scores in the Common Entrance Exams. There are virtually no formal or social barriers to women's access to education, and there are twice as many girls' schools as boys' schools. The educational status of women is an important factor in ensuring that Jamaican women have relatively better access to employment than do women in many other developing countries.

Nevertheless, there is a degree of sexual stereotyping in the curriculum choice and professional streaming. Teachers' college enrollments are 75 percent female, and there is a strong concentration of women in traditional women's skill categories such as nursing. The official statistics show an overrepresentation of women in the professional, technical administrative, executive, and managerial category (58 percent female) where education is an important factor in job access.

B. Labor Force Participation

The most striking feature of Jamaican labor force data is the high labor force participation rate for women. In 1986 it was 64 percent for women and 78 percent for men. This contrasts sharply with other countries in the Latin American and Caribbean region. Data compiled by the U.S. Department of Commerce Bureau of the Census and A.I.D. show that only 2 of the 22 countries surveyed during the 1970s in the region had higher female participation rates. Guyana and Haiti, which are among the poorest countries in the world, had rates of 52 and 51 percent, respectively. Jamaica's rate was 47 percent. All other countries were less than 28 percent. The cross-sectional tendency for low-income countries to have higher participation rates, especially among women, echoes the time series variations in female participation rates in Jamaica which rose as per capita incomes fell. The participation rates for women fall off after the age of 50 much more rapidly than they do for men. This means that the additional work effort by women is concentrated in the child-bearing years.

C. Sectoral and Occupational Distributions

Tables 1.1 and 1.2 show the distribution of male and female employment in Jamaica by sector and occupation in 1980. There are three areas where women have a sharply higher level of activity than men. The first is self-employed persons in the commercial sector. This accounted for 13 percent of all working women, but only 3 percent of working men. This group is largely the higglers. A good portion of these women are poor, but there are also a few who are well-off.

The second area of relatively high female employment is service workers in the "other services" sector. These are employed (as opposed to self-employed) workers, the majority of whom are domestics. They account for 17 percent of working women and only 2 percent of working men. Again, this is a relatively low-income category of worker.

TABLE 11: JAMAICA

DISTRIBUTION OF EMPLOYMENT BY SECTOR AND OCCUPATION, 1980

	Agri-culture	Manufac-turing	Construc-tion	Transpor-tation	Commerce	Public Admini-stration	Other Services	Not Specified	Total
					Percent Both Sexes				
Professional, Technical Administrative, Executive, Managerial	0	1	0	0	1	6	1	0	9
Clerical and Sales	0	1	0	2	4	3	2	0	12
Self-Employed	28	2	1	1	7	0	3	0	41
Services	0	0	0	0	0	4	8	0	13
Craftsmen, Operators	1	5	2	1	0	1	0	0	12
Unskilled Manual	8	1	0	1	0	2	1	0	13
Not Specified	0	0	0	0	0	0	0	0	0
TOTAL	37	10	3	5	13	15	15	1	100
					Female				
Professional, Technical Administrative, Executive, Managerial	0	0	0	0	0	11	1	0	13
Clerical and Sales	0	1	0	3	7	4	3	0	18
Self-Employed	13	1	0	0	13	0	3	0	31
Services	0	0	0	0	0	4	17	0	22
Craftsmen, Operators	0	3	0	0	0	0	0	0	3
Unskilled Manual	8	1	0	0	0	2	0	0	12
Not Specified	0	0	0	0	0	0	0	0	0
TOTAL	23	7	0	3	21	21	25	1	100
					Male				
Professional, Technical Administrative, Executive, Managerial	0	1	0	0	1	3	1	0	6
Clerical and Sales	0	1	0	1	3	2	1	0	8
Self-Employed	37	2	1	2	3	0	2	0	47
Services	0	0	0	0	0	4	2	0	7
Craftsmen, Operators	1	7	4	2	0	1	0	0	17
Unskilled Manual	8	1	0	1	0	2	1	0	14
Not Specified	0	0	0	0	0	0	0	0	0
TOTAL	47	13	6	6	8	12	9	0	100

SOURCE: LABOUR FORCE SURVEY.

TABLE 12: JAMAICA

DISTRIBUTION OF EMPLOYMENT BY SECTOR AND OCCUPATION, 1989

	Agri-culture	Manufac-turing	Construc-tion	Transpor-tation	Commerce	Public Admini-stration	Other Services	Not Specified	Total
					000'S Both Sexes				
Professional, Technical Administrative, Executive, Managerial	1	4	1	1	4	41	10	1	63
Clerical and Sales	2	9	0	11	30	18	12	1	83
Self-Employed	195	12	4	7	49	0	18	0	285
Services	1	3	0	2	2	26	57	1	92
Craftsmen, Operators	6	37	17	9	2	7	3	0	81
Unskilled Manual	56	7	2	4	3	14	6	1	93
Not Specified	0	0	0	0	0	0	0	0	0
TOTAL	261	72	24	34	90	106	106	4	697
					Female				
Professional, Technical Administrative, Executive, Managerial	0	1	0	0	1	30	4	0	36
Clerical and Sales	1	4	0	7	19	10	8	1	50
Self-Employed	37	3	0	0	36	0	9	0	85
Services	1	1	0	1	1	10	47	0	61
Craftsmen, Operators	0	7	0	0	0	1	1	0	9
Unskilled Manual	23	2	0	0	1	6	1	0	33
Not Specified	0	0	0	0	0	0	0	1	1
TOTAL	62	18	0	8	58	57	70	2	275
					Male				
Professional, Technical Administrative, Executive, Managerial	1	3	1	1	3	11	6	1	27
Clerical and Sales	1	5	0	4	11	8	4	0	33
Self-Employed	158	9	4	7	13	0	9	0	200
Services	0	2	0	1	1	16	10	1	31
Craftsmen, Operators	6	30	17	9	2	6	2	0	72
Unskilled Manual	33	5	2	4	2	8	5	1	60
Not Specified	0	0	0	0	0	0	0	0	0
TOTAL	199	54	24	27	32	49	36	2	422

SOURCE: LABOUR FORCE SURVEY.

The third area is professional, technical, and administrative workers in the public sector, which included 11 percent of working women and just 3 percent of working men. This group has historically been relatively well paid although there have been changes here during the last decade as will be discussed in more detail below.

Women are underrepresented as self-employed farmers (13 percent of working women as compared with 37 percent of working men). This is a low-income category. It is interesting to note that among unskilled manual labor in the agricultural sector the male and female shares are the same: 8 percent. This relative parity holds for manual labor in the non-agricultural sectors as well. This a very low-income category.

Men have relatively higher concentration as operators in the manufacturing and construction sectors.

D. Job Mobility

An interesting study by Derek Gordon based on the 1984 National Mobility Survey sheds more light on the class and occupational distribution of men and women (Gordon, 1987). It notes that despite the higher representation of women in the professional, technical administrative, executive, and managerial jobs, women tended to be much more heavily concentrated in the low end of the category. They held jobs such as sales clerks, secretaries, and teachers, while the men were more likely to be engineers or attorneys, and had higher earnings (Table 1.3). Nonetheless, there is an important concentration of relatively well paid women in this broad class of occupations.

The Gordon study also provides data on the relative mobility of men and women between jobs and socioeconomic classes. It indicates that, based on differences between occupations of individuals and their parents, there has been an expansion of the middle class occupations and of service workers, and that small peasant farmers have been the source of these class/occupation migrants. The study also indicates that women are 55 percent more mobile than men as measured by their relative propensity to move into occupations different from those of their parents.

> The opportunity for the children of small farmers, traders and workers to become nurses, teachers, clerks and civil servants has played a significant role in sustaining support for the present social order....Since these opportunities are based more on the expansion of positions brought about by economic growth than on greater intrinsic mobility changes, stagnation in the economy could mean sharp decline in upward mobility....it is the small farmers and traders who stand to lose the most from this (Gordon, 1987).

The destination occupations identified here--nurses, teachers, clerks, and civil servants--are particularly important to women. These are largely public sector jobs. So an economic recession restricts the mobility of women, but one in which public sector contraction leads the way is especially damaging to their prospects for economic advancement.

It is important to distinguish between upward mobility and general mobility. Many women are leaving the farm, and the upper middle ranks hold increasing opportunities for them. It is even possible that mobility among the poorest women--those rural female heads of households who own no land--may be greater than that of women who are married or have small plots of land. Young women among whom unemployment is very high may be especially mobile, particularly if they have no children.

TABLE 1.3: JAMAICA

OCCUPATIONAL MOBILITY

	Mobility				Income	
	Male		Female		Percent	Average
	Origin	Destination	Origin	Destination	< $50/WK	$/MO.
Higher Managerial and Professional	0.7	1.8	0.9	1.0	0.0	1533
Lower Managerial and Supervisory	1.0	1.7	1.5	1.4	8.0	914
Lower Professional, Technical, Sales	1.8	4.2	1.9	9.1	6.6	789
Secretarial and Accounting	0.6	1.6	0.5	5.8	2.2	660
Other Clerks (Not Sales)	0.8	1.5	0.7	5.0	11.0	537
Sales Clerks	0.5	1.1	0.8	4.4	34.2	281
TOTAL MIDDLE STRATA	**5.3**	**11.8**	**6.3**	**26.7**	**9.3**	**749**
Employers	1.4	1.7	1.6	0.6	13.2	765
Artisans	6.6	6.2	7.1	4.1	40.4	324
Traders	6.4	3.3	7.5	12.6	47.2	263
Small Farmers	52.8	32.6	47.5	12.6	63.9	183
TOTAL PETIT BOURGEOISIE	**67.2**	**43.7**	**63.7**	**29.9**	**56.2**	**212**
Foremen and Higher Service	1.8	2.8	2.3	0.8	5.1	725
Craftsmen and Operatives	7.6	21.1	7.9	5.5	17.0	446
Service Workers (Not Domestic)	2.5	6.5	3.4	12.6	24.5	353
Unskilled Manual	3.9	7.8	3.8	4.0	30.3	309
Agricultural Laborers	5.7	6.1	7.5	4.3	60.6	168
Domestic Service	6.2	0.2	5.1	16.2	78.3	157
TOTAL MANUAL	**21.4**	**44.3**	**25.0**	**27.3**	**34.5**	**343**
	93.8	99.8	94.9	83.8	100.0	344

SOURCE: DEREK GORDON, CLASS, STATUS AND MOBILITY IN JAMAICA.

However, the Mobility Survey data indicate that the majority of female farm leavers are becoming domestics and moving to other service sector jobs. They are also shifting into trading, export manufacturing, and perhaps into low level clerical jobs. In many instances, pay and working conditions are only slightly better. It is not the case that farm girls are becoming professionals in large numbers. The better jobs are being filled by women who have urban roots and who come from families whose heads were traders, artisans and higher in the socioeconomic scale. Women proceed from the farm to the office by stages that may correspond to generations. In terms of employment and income, the main effect of a public sector contraction may be to block middle income women's progress to the upper middle income level. Poorer rural and urban women may be much less directly affected.

E. Unemployment

The unemployment rate has been persistently high for many years remaining over 20 percent since 1972 (Table 1.4). The rates for women have been uniformly more that twice that of men for over 20 years. However, the unemployment data are reported differently in Jamaica than in most other countries. The figures include those who claim to be in the labor force but are not actively seeking work. According to the more conventional measure of unemployment which includes only active job-seekers, the Jamaican rates look less extreme, varying between 8.6 and 12.9 percent since 1973 although the usefulness of the job-seeker rate could be contested if there is a significant discouraged worker effect. Both the broad unemployment measure and the job seeking rate moved sharply higher in 1980 and then settled back slightly. But the aggregate figures hide important male-female differences. The male job seeking rate fell back to traditional levels in 1981 but the female rate stayed much higher throughout the period since 1980.

The ranking of sectors by unemployment rate is roughly the same for men and women (Table 1.5). Reported rates in agriculture are the lowest, although there may be significant levels of underemployment. Mining is second lowest although it is a highly variable series. Commerce is second lowest for both men and women. The highest rate for women is in manufacturing although the rate has been falling rather sharply in recent years. This decline has occurred despite a sharp rise in the number of women in the sector. There are roughly twice as many men in manufacturing.

Women in the non-public service sector have significantly higher rates of unemployment than in other sectors. This is in sharp contrast to men for whom this sector has one of the lowest unemployment rates.

A striking feature of the data is that over 40 percent of the unemployed have no previous industry or occupation. For women the portion was 45 percent and for men it was 39 percent. Among women with no previous occupation, the unemployment rate in 1986 was 47.0 percent as opposed to only 20.8 percent for men. The number for females has been dropping fairly fast and was 53.5 percent in 1984.

These data, combined with the data on job seekers versus non-seekers, reveal a clear and important pattern. Women, in larger numbers than men, left the non-seeking ranks and searched actively for work during the period from 1980 to 1985. Many of these women had no previous work experience and therefore were not classified according to sector or occupation.

TABLE 1.4: JAMAICA

BASIC ECONOMIC INDICATORS, 1975-89

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	19	1987	1988	1989
GNP ($1980)	5.7	5.1	5.0	4.9	4.8	4.4	4.6	4.7	4.8	4.3	4.0	4.2			
Population	2.0	1.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3			
GNP per capita	2.9	4.6	2.5	2.4	2.3	2.1	2.2	2.2	2.2	2.0	1.8	1.9			
Female unemployment rate	31	31	35	35	36	40	39	40	38	37	35	35	31		
Female job seek rate	11	11	14	13	14	18	13	17	17	15	16	14	12		
Male unemployment	11	12	16	13	14	17	15	15	16	16	15	17	13		
Male job seek rate	7	8	9	7	8	11	7	9	8	8	8	9	6		
Consumer price index	106.7	117.2	130.7	176.4	227.2	291.3	326.1	347.4	386.7	494.3	622.9	714.8	762.9	825.5	
Percent change	17.4	9.8	11.5	35.0	28.8	28.2	11.9	6.5	11.3	27.8	26.0	14.8	6.7	8.2	
Male wages	24.1	24.5	26.1	28.6	34.0	46.8	47.5	51.9	101.1	97.0	101.9	94.6	109.4		
% Change nominal	39.1	1.7	6.5	9.6	18.9	37.6	1.5	9.3	94.8	-4.1	5.1	-7.2	15.6		
% Change real	21.7	-8.2	-5.0	-25.4	-9.9	9.4	-10.5	2.7	83.5	-31.9	-21.0	-21.9	8.9		
Female wages	18.0	20.7	22.8	23.1	26.1	35.1	37.7	39.3	83.1	72.2	83.1	77.7	98.0		
% Change nominal	36.8	15.0	10.1	1.3	13.0	34.5	7.4	4.2	111.5	-13.1	15.1	-6.5	26.1		
% Change real	19.4	5.2	-1.4	-33.6	-15.8	6.3	-4.5	-2.3	100.1	-40.9	-10.9	-21.3	19.4		
Ratio male/female wages	1.34	1.18	1.14	1.24	1.30	1.33	1.26	1.32	1.22	1.34	1.23	1.22	1.12		
Terms of trade	126.1	116.2	99.8	114.8	113.2	103.8	94.9	100.0	80.1	90.4	74.4	84.4	91.1		
Percent change	31.1	-7.9	-14.1	15.0	-1.4	-8.3	-8.6	5.4	-19.9	12.9	-17.7	13.4	7.9		
GDP by sector ($1974)															
Agriculture	157.0	157.0	162.0	178.0	160.0	153.0	156.0	144.0	154.0	170.0	164.0	160.0	169.0	161	
Mining	157.0	124.0	147.0	150.0	148.0	163.0	164.0	117.0	118.0	119.0	95.0	102.0	107.0	102	
Manufacturing	396	379	350	334	316	281	284	305	311	298	299	308	325	329	
Electricity	23	24	23	24	23	24	24	25	27	27	28	31	34	33	
Construction	211	169	134	138	137	99	99	115	122	114	104	107	122	140	
Commerce	415	337	310	306	294	311	328	354	343	341	315	335	370	369	
Transportation	144	138	129	130	130	124	126	127	134	138	140	154	165	168	
Financial services	241	244	249	245	253	251	260	268	288	289	278	269	279	290	
General government	265	307	328	344	361	352	359	368	370	354	334	322	323	334	
Other services	143	135	132	127	118	73	74	77	76	77	79	81	86	87	
TOTAL	2152	2014	1964	1976	1940	1831	1874	1900	1943	1927	1836	1869	1980	2013	2050
							Percent Change								
Agriculture		0.0	3.2	9.9	-10.1	-4.4	2.0	-7.7	6.9	10.4	-3.5	-2.4	5.6	-4.7	
Mining		-21.0	18.5	2.0	-1.3	10.1	0.6	-28.7	0.9	0.8	-20.2	7.4	4.9	-4.7	
Manufacturing		-4.3	-7.7	-4.6	-5.4	-11.1	1.1	7.4	2.0	-4.2	0.3	3.0	5.5	1.2	
Electricity		4.3	-4.2	4.3	-4.2	4.3	0.0	4.2	8.0	0.0	3.7	10.7	9.7	-2.9	
Construction		-19.9	-20.7	3.0	-0.7	-27.7	0.0	16.2	6.1	-6.6	-8.8	2.9	14.0	14.8	
Commerce		-18.8	-8.0	-1.3	-3.9	5.8	5.5	7.9	-3.1	-0.6	-7.6	6.3	10.4	-0.3	
Transportation		-4.2	-6.5	0.8	0.0	-4.6	1.6	0.8	5.5	3.0	1.4	10.0	7.1	1.8	
Financial services		1.2	2.0	-1.6	3.3	-0.8	3.6	3.1	7.5	0.3	-3.8	-3.2	3.7	3.9	
General government		15.8	6.8	4.9	4.9	-2.5	2.0	2.5	0.5	-4.3	-5.6	-3.6	0.3	3.4	
Other services		-5.6	-2.2	-3.8	-7.1	-38.1	1.4	4.1	-1.3	1.3	2.6	2.5	6.2	1.2	
TOTAL		-6.4	-2.5	0.6	-1.8	-5.6	2.3	1.4	2.3	-0.8	-4.7	1.8	5.9	1.7	1.8

TABLE 1.5: JAMAICA

UNEMPLOYMENT RATES BY SECTOR, 1987

	Male	Female	Both
Agriculture	1.8	5.6	2.7
Mining	1.9	12.5	9.5
Manufacturing	10.5	26.0	16.0
Construction	18.9	30.0	19.2
Transportation	10.5	12.8	10.9
Commerce	11.7	11.0	11.2
Public Administration	11.7	16.9	14.7
Other Services	9.5	28.4	22.8
Total Classifiable	8.3	19.5	13.1
Not Specified	60.4	68.4	64.8
TOTAL	12.8	31.2	21.2

SOURCE: LABOUR FORCE SURVEY.

F. The Distribution of Income and Consumption

Jamaica has a very skewed distribution of income. In 1972 the bottom 10 percent of households earned about 2 percent of the income while the upper 10 percent earned about 33 percent of the income. This inequality has a long history that is partly rooted in the problems of unequal access to land. The 1984 Household Expenditure Survey (HES) and the Survey of Living Conditions (SLC) begun in 1988 offer further useful information on the distribution of economic well-being. These data reflect the relatively high incidence of female-headed households in Jamaica. In the Kingston Metropolitan area, 43 percent of families have a female head according to the SLC. In the rural areas, the percentage is 36 percent. The data on per capita consumption are particularly revealing. Female-headed households are overrepresented in the lowest quintile--47 percent as opposed to 39 percent in the population as a whole--and are underrepresented in the highest quintile--32 percent as opposed to 39 percent. However, in the middle ranges the pattern is reversed so that women are underrepresented in the second lowest quintile and overrepresented in the second highest.

This suggests several things. First, there is a predominance of female-headed families among the very poor. Second, it may be that women in the upper job categories do not achieve the same income levels as men because of discrimination in pay scales and are, consequently, scarce in the highest quintile and are bunched in the second quintile.

Another likely explanation, however, is that the lower managerial, professional, secretarial, and clerical jobs that constitute the second rank of the upper income levels are the target destinations of the more upwardly mobile women. These are the job categories that have been growing most quickly for women according to the Mobility Survey. Women are paid less than men, but the gap has been steadily closing partly as a result of their greater mobility. In 1987 the median wage of men was just 12 percent higher than that of women as compared with 35 percent in 1968. But the persistence of a wage gap despite the higher educational status of women gives evidence of at least some continuing discrimination against women in labor markets.

Self-employed agricultural workers are highly concentrated in the lowest quintile of per capita consumption. Those in service occupations are concentrated in quintiles two and three, reflecting the relatively large numbers of women in these moderately paying occupations.

The data also suggest that rural families are poorer than urban ones, which is consistent with patterns in other countries. However, the rural/urban distinction is relatively unimportant to overall inequality. Analysis presented in the SLC suggests that only 7 percent of the inequality is due to differences in consumption between rural and urban areas, while 93 percent of it is due to dispersion within the rural and urban areas. In other words, there are distinct urban poor and rural poor.

These conclusions are backed up by the data on consumption inequality from the 1984 National Mobility Survey as indicated in Table 1.3. In the rural areas, the poorest are the agricultural laborers with per capita consumption of only J$168 per month, which is far less than the average of J$344. In this group, 6.1 percent were male and 4.3 percent were female. Small farmers also have far less than average at J$183 per month. Here men are overwhelmingly dominant--33 percent relative to 12 percent. However, the poorest of all are domestic servants who consumed an average of J$157 per month. These are almost entirely women. There are no data on the rural/urban distribution of domestics, but it is likely that a significant portion are in the urban

area. Small traders are also relatively poor with per capita consumption of J$263. These are nearly all women, and a large portion are in the urban areas. Following them are sales clerks with J$281, again a female-dominated category.

What emerges from these figures is that the poorest of the poor are women farmers, either laborers or small peasants. Among these, the female-headed households are probably worst off. However, this is a rather small category given the lower incidence of female-headed households in the rural areas, the smaller numbers of female farmers, and the high propensity of poorer rural women to move to the urban sector and into non-agricultural occupations. The propensity itself is probably a good indication of how bad conditions are for this socioeconomic group.

The fact that 8 percent of women and 8 percent of men are agricultural sector laborers suggests that among this group at least women are no more inclined to migrate than men. It may be that many of these women are married to men who are also laborers and find the joint decision to migrate difficult. Many of them must have children and find the dual responsibility of child rearing and farm labor burdensome. If they are single parents, it may be more difficult to find non-agricultural work because jobs such as domestics or garment sector workers favor those without children. Either way it is likely that there is an important pocket of hardship here.

Domestic servants are also among the poorest and of them the single mothers and their dependents are undoubtedly worse off. Women traders are somewhat better off but are still well below average. Non-domestic service workers have roughly average wages. In the middle income ranges are occupations such as craftsmen and operatives that are more heavily dominated by men. Then there is an important group of upper middle income women in lower professional secretarial and clerical jobs who earn significantly more than the average. This group accounts for roughly one fifth of all women. Their jobs are relatively concentrated in the public sector and represent an important conduit of upward mobility for women although one which is not directly accessible by women in the lower socioeconomic groups.

III. ADJUSTMENT PROBLEMS AND POLICIES

A. The Manley Years

In the years prior to 1972, Jamaica enjoyed steady growth; between 1973 and 1979, however, per capita GDP fell by over 20 percent and foreign debt increased almost one and a half times. By the end of the decade, skilled labor and capital were both fleeing the country. Foreign exchange reserves were exhausted, unemployment was high, and inflation was rising.

External factors such as the adverse changes in oil and bauxite prices played a role, but shortsighted policies are at the root of the economic problems that built to crisis proportions by 1980. The Manley government (1972-1980) sharply expanded the role of the public sector in an effort to increase social services and increase real wages and employment. The public sector deficit ballooned from 5 percent of GDP to 24 percent in the first four years of the Manley regime despite increased taxes on corporations. An export levy was imposed on bauxite and increasing controls and restrictions were placed on foreign trade. The economy became progressively more focused on production for the limited domestic market, and exports withered. Much of the increased public sector spending was for consumption rather than investment, and private investment contracted sharply. Real interest rates were negative and domestic savings fell steadily from 1972 to 1976.

In 1976 corrective measures were taken but these were of the wrong sort. Emerging BOP problems were addressed with more stringent import controls. Attempts to restrain aggregate demand were made through the imposition of wage and price controls. Income taxes and a wide variety of indirect taxes were hiked to try to contain the fiscal deficit. In general, the problems of excessive intervention were dealt with by applying more of the same. These efforts were accompanied by an IMF stand-by arrangement which failed in December 1977 and an extended Fund facility (EFF), which was abrogated in 1979. Before the EFF agreement fell apart, Jamaica did implement some adjustment measures. Among them was a devaluation which caused a sharp increase in domestic prices. Real incomes were severely eroded, and this was a major contributing factor in the collapse of the agreement.

B. 1980 to 1985

In 1980 it was clear that several adjustments were necessary, including:

1. a reduction in the fiscal deficit largely through reductions in spending and reforms to public enterprises;

2. a substantial devaluation and the creation of a flexible exchange regime; and

3. reform of the trade regime to root out anti-export bias.

Accordingly, the government began a reform program with the support of a three-year EFF for US$698 million signed with the IMF in 1981. The World Bank also concluded a series of three structural adjustment loans (SALs) in 1982, 1983, and 1984 for a total of US$190 million.

Progress under the reform program between 1980 and 1985 is best characterized as slow and uneven. Again, external factors played a role, with the value of bauxite exports declining by almost 60 percent leaving it second to tourism as a foreign exchange earner. But delays in the implementation of reforms were equally critical. In effect, the government put off reforms until its hand was forced by events, by which time further unnecessary damage was done.

There were three areas in which there were important delays. First, government expenditure remained stubbornly above 40 percent of GDP for the first four years of the program, and the fiscal deficit actually worsened before settling back slightly in 1984/85. In terms of revenue, major tax reform studies were launched in 1983 but very little change occurred until 1986 and 1987.

Second, the government delayed changing the exchange regime until late 1983. This resulted in a steady appreciation of the real effective exchange rate from 1979 on, which hurt non-traditional exports. Bauxite exports contracted as well, and imports surged as a result of the expansionary fiscal posture and the rising real exchange rate. The country was forced to run down reserves, and, as arrears emerged, there were sharp reductions in official capital inflows. By then the government had little alternative but to devalue and to adopt a more conservative fiscal policy.

The third problem area concerns the trade regime. During 1980-85 a large number of trade reforms were implemented. Import licensing and quantitative restrictions (QRs) were relaxed by stages. These changes were more apparent than real. As the QRs were removed, duty rates were increased. Reference prices (on which duties are based) were also raised. QRs remained for goods handled by the Jamaica Commodity Trading Company (JCTC), and a large number of exemptions persisted. The World Bank estimates (Program Performance Audit Report 8018) that anti-export bias as measured by effective protection of production for local markets actually increased over the period.

By the end of 1985, the economic situation began to deteriorate rapidly. A further drop in bauxite prices put intense pressure on the BOP. Inflation was accelerating, investment and capital formation were sluggish, and living standards were declining.

C. 1985 to Present

It became clear that the pace of reform had been too slow and that the benefits of adjustment had failed to materialize. Accordingly, a tripartite team (IMF, World Bank, and A.I.D.) was invited to have a "fresh look" at adjustment in Jamaica. In May 1986 they recommended the return to a flexible exchange regime, greater fiscal restraint, the elimination of price control subsidies, and other market interventions.

The Jamaican authorities accepted much of the content of the report but disagreed over the speed of fiscal reform, the need for devaluation, and the phasing out of the JCTC. There followed a period of stalemate during which the Paris Club rescheduling was stopped and a new IMF agreement was canceled, primarily because of differences over exchange reform. But the dialogue with the IMF eventually resumed and a new 15-month stand-by arrangement was reached in January 1987. Paris Club and commercial bank rescheduling were then completed. Shortly thereafter, the World Bank signed a Trade and Financial Sector Adjustment Loan (SECAL), a Financial SECAL, and a Public Enterprises SECAL.

The government also produced, with the assistance of the World Bank and bilateral donors, its first Medium Term Macroeconomic Policy Framework. This outlined the intended course of reforms and included plans to restructure public expenditures, to prioritize infrastructure investments, and to establish social services to protect those most vulnerable to the adverse effects of adjustment.

From 1986 the economic situation began to improve slowly. The cuts in government spending on public sector wages and on general subsidies that were implemented in 1984/85 and 1985/86 began to have an impact on the public sector deficit and gave greater scope for private sector access to credit. These developments were helped by an improvement in external events. With the fall in oil prices, the import bill was reduced and the energy-intensive aluminum industry became more competitive. Oil prices reduced the import bill and made the energy- intensive aluminum industry more competitive. International interest rates softened and tourist receipts improved.

As a result, growth strengthened further in 1987. In September 1988, however, hurricane Gilbert struck and caused damage estimated in excess of US$1 billion. This pushed the deficit reduction program off track, and the deficit leapt from 5.4 percent of GDP in 1987/88 to 13.3 percent in 1988/89. Because of shortfalls in the disbursements of foreign assistance, financing of the shortfall resulted in domestic borrowing of some 6 percent of GDP.

BOP pressures were mitigated by two factors. Reinsurance receipts limited the current account deficit to just over 1 percent of GDP, and a bridge loan from the commercial banks allowed the clearing of arrears that had accumulated in the wake of the hurricane. But these effects were temporary and by mid-March 1989 the arrears surfaced again.

The new government that took office in February 1989 resisted devaluation despite the arrears problem and the fact that the exchange rate had remained fixed at J$5.5 to the U.S. dollar since October 1985. The government's economic program reflected a belief that BOP problems were temporary and could be managed with tight monetary and fiscal policies. This meant decreasing the public sector deficit and sharply restraining the growth of bank credit. The government has been able to keep on track with the fiscal objectives through early 1990 although it is relying heavily on short-term measures such as expenditure postponement and sell-offs of public assets.

Controlling bank credit has proved much more difficult. The basic problem is that when the public anticipates the need for an eventual devaluation, they borrow Jamaican dollars and buy U.S. dollars through the auction. These dollars sustain capital flight and greater imports. This process resulted in the depletion of reserves and the re-emergence of arrears in the second half of 1989. Moreover, in order to meet the increased demand for credit, the banking system reduced its holdings of Bank of Jamaica (BOJ) certificates of deposit and Treasury bills. This put upward pressure on interest rates. BOJ efforts to sell more certificates of deposit to reduce pressure on the Jamaican dollar resulted in sharply higher public sector interest costs and have raised the deficit by some J$500-600 million annually in recent years. It is important to recognize that while devaluation may imply exchange losses for the BOJ that raise the public sector deficit, there are deficit-raising effects of not devaluing as well.

The government did allow some depreciation of the Jamaican dollar in the auction from 5.5 in June 1989 to 6.2 in October. At the same time, it instituted a set of discount penalties for government paper and raised the whole spectrum of interest rates by 5-7 percentage points and imposed ceilings on individual banks' credit. On November 1, 1989 the central bank suspended the auction and set a fixed rate of J$6.5 to the U.S. dollar (roughly the same rate as October 1985). In February 1990 it reintroduced the liquid asset requirement.

These developments represent considerable backsliding in the process of reforming the exchange system and in modernizing the financial and banking systems.

In summary then, macroeconomic policies have evolved as follows.

The fiscal deficits were excessive in the early to mid-1970s. Attempts to control them involved even greater intervention and were only temporarily effective. This approach to deficit control was finally recognized as inappropriate in the early 1980s, but spending was not effectively curbed until 1984/85, and revenue reforms were not made until even later. Through the latter part of the 1980s, the deficit has shrunk as a share of GDP and Jamaica is now holding to IMF targets. Further efforts are needed, however, and it is disturbing that temporary measures such as privatizations and asset sell-offs are relied on to cope with the deficit.

The exchange regime has been a chronic source of problems. The government has consistently resisted devaluation in the face of BOP pressures. Export earnings are volatile, but the government has tended to misread permanent shifts as temporary fluctuations. Holding the exchange rate in these circumstances is difficult to do convincingly when reserves are limited and when financial markets are too thin and poorly diversified to buffer the swings in speculative demand for foreign exchange. The result has been a generally overvalued currency that compromises exports, periodic exchange crises that create uncertainty, and high interest rates that discourage investment and increase the cost of public debt. Reform of the exchange system along with associated changes in banking and financial markets remains one of the key challenges for future adjustment policy.

It must also be said that the official lenders allowed Jamaica to run up large current account deficits in the early 1980s by providing loans that would not have come from the commercial banks. The result was a substantial increase in foreign debt and very little increase in the capacity to service debt. The debt load is now one of the highest in the world, and one must question whether this was appropriate given the delays and the incomplete nature of the reforms that were implemented under the adjustment programs.

D. The Mining Sector

In the early 1970s, Jamaica spearheaded a movement among bauxite producers to control supplies to multinational aluminum companies. Jamaica had been able to capture only a tiny portion of value added on its resource because the multinationals used transfer pricing to shift their profits to more favorable tax environments. The Jamaicans were only partially successful in organizing this cartel, and in 1974 they imposed a 7.5 percent levy on the realized price of aluminum. In this they were followed by a few other producers but notably not by the low-cost ones in Australia and Brazil. This came at a time of rising oil prices which caused Jamaican production to become less competitive relative to those with local coal reserves. Nevertheless, the levy generated substantial revenues which were supposed to be used to support development of new industries. In fact, they were largely spent on government acquisitions of existing private enterprises and on consumption.

Multinationals with large sunk costs had little choice but to continue production. But over the later 1970s the market for aluminum softened and by 1981/82 the multinationals were losing money. The levy, which was based on revenues rather than profits, proved an inflexible taxation instrument in these circumstances and plant closures and production reductions ensued. The value of the levy and royalties dropped from a peak of US$209 million in 1980 to US$71 million in 1985.

The bauxite industry at its peak provided 10,000 jobs and was therefore significant but not crucial to overall employment. However, it accounted for three fourths of merchandise exports and one third of government revenue. Strangely, the first World Bank SAL completely ignored the bauxite/aluminum industry. This is particularly odd given the concern with the fiscal deficit and export development in SAL 1. Problems in taxation of the mining sector had received detailed treatment in the January 1982 Economic Report of the World Bank and could have provided the basis for conditions attached to SAL 1 signed the following month. Mining tax reforms have subsequently been implemented, but much less ground might have been lost had the World Bank pressed for earlier action. Weak conditionality is a recurrent theme in the World Bank's adjustment program in Jamaica.

E. The Agricultural Sector

Jamaican agriculture has been in decline since the early 1960s with its contribution to GDP dropping from 17 percent to 8 percent by 1987. Exports of sugar, citrus, and bananas all fell steadily in volume terms. Overall agricultural sector exports declined by an average of 4 percent a year. Production for the domestic market, however, increased by 4 percent a year.

In the early stages, output of crops such as citrus and bananas (of which a significant portion come from smaller producers) was affected by the bauxite land tenancy arrangements which induced farmers to switch from tree crops to annuals. But in large measure the drop in agricultural exports was the result of an explicit import-substitution policy created by an overvalued exchange rate and the establishment of Export Marketing Organizations (EMOs) that had the effect of depressing the farmgate prices of export crops. Domestic crops, which were unregulated, enjoyed increasing tariff protection and a range of direct and indirect subsidies. The protection of domestic crops has made them less competitive with imports over time. Production is done on a large number of fragmented holdings according to a risk-minimizing mix of crop and livestock that is particularly resistant to the introduction of new technology. Soil erosion on hillside plots further reduces yields and creates potential flooding problems. Future growth prospects are dampened by the generally low-income responsiveness of demand for the kinds of crops produced.

The taxation of exports implicit in the import-substitution program throttled new investment for citrus, bananas, sugar, coffee, and cocoa, in which Jamaica has a comparative advantage. Productivity and yields for both export and domestic production have fallen well behind international levels. As a result, the agricultural sector employs roughly 30 percent of the labor force, but accounts for only 6 percent of GDP.

In addition, the JCTC has dealt in a range of commodities over which it has monopoly trading rights. Significant cross-subsidies were involved here, further distorting domestic prices and straining the public sector budget in part because of a failure to effectively target the subsidies for food items to those most in need.

The new government in 1980 recognized the need for change. The gradual reforms in the exchange and trade systems have had a positive impact as have the reforms in taxation, import licensing, and foreign investment. Land use problems have been addressed through the Agro 21 program since 1983 which supported development of non-traditional crops on larger commercial plots that had been idle in the government land inventory. Agro 21 also responded to the erosion problems stemming from the hillside cultivation of annual crops by supporting the establishment of permanent perennial crops. The Ministry of Agriculture has been selling off land in small plots and issuing titles without which farmers are unable to raise credit.

The EMOs have been restructured with increased emphasis on marketing functions and improved pricing formulas which have enabled the sugar and banana industries to make significant strides. Parallel changes have been made in the domestic market with the reshaping of the Agricultural Marketing Corporation into a new form stripped of regulatory and pricing powers and focused on technical assistance to private traders.

Agriculture credit had been made available through a range of government institutions suffering arrears and defaults. The government eliminated these institutions and established the Agricultural Credit Bank, which wholesales agricultural credit to private financial intermediaries. Loan rates were raised and became positive in real terms by 1985.

Overall progress has been modest at best, despite the reforms. Agricultural GDP increased by only 6 percent between FY83 and FY87, and declined by 4 percent in FY88 due to hurricane Gilbert. The World Bank's three SALs were important in creating incentives for the positive changes outlined above, but conditionality and enforcement of it was weak causing progress to be slow or negligible in a number of areas:

1. A wide range of domestic crops, particularly vegetables, remains subject to high tariffs and quantitative restrictions. Protected domestic production remains inefficient.

2. The JCTC continues to maintain heavily subsidized prices for a number of imported food items and this stunts local production.

3. Farm credit rates, although now positive in real terms, remain below other interest rates, and the gap should be closed to ensure the efficient allocation of resources. It should be remembered that the very high real interest rates are themselves a reflection of the need for continued fiscal restraint and the problems of the exchange regime. Further reforms are needed to allow the commercial banks into the small farm credit business.

4. The Export Marketing Organizations still have overly restrictive policies for the citrus and cocoa industries.

5. Further divestment of government land and agricultural enterprises is needed.

6. The Ministry of Agriculture budget suffered as a result of fiscal restraint to the point where research, extension services, and staff morale were seriously impaired. Weaknesses here threaten other components of the reform program.

7. Environmental concerns need to be more fully addressed. Progress toward controlling land erosion due to unregulated small hillside cultivation was not judged satisfactory under SAL 1. There remain difficult problems concerning the use of pesticides.

Agriculture has long been a neglected sector. The problems are therefore deep-rooted and will take time to turn around. The meter is running on the external debt all the time, but the pace and phasing of reforms cannot be forced. Small farmers cannot effectively exploit newly privatized land without extension services. Existing farmers cannot meet the challenge of reduced protection without credit for new investment. Lags in the revitalization of export crops are inevitable because new trees take time to yield.

A new Agricultural SECAL is in progress, and it addresses these issues. Many of them were covered in the previous three SALs. In the early 1980s, the SAL was a new instrument for the World Bank, and it was perhaps appropriate that the conditionality was cautiously constructed. However, as experience was gained, the pressing need for reforms should probably have been translated into tougher and more comprehensive conditionality. In particular:

1. There was extensive use of conditions requiring studies rather than action.

2. There were many waivers of conditions.

3. Unmet conditions were frequently rolled into future loan packages.

4. Language was often loose and imprecise employing terms such as "satisfactory progress."

These weaknesses apply to the non-agricultural components of the SALs as well. This is important because of the interplay of macroeconomic reforms and those in the agricultural sector. They are also important to donors who must consider whether their own efforts should be linked to those of the World Bank.

F. The Manufacturing Sector

In contrast to bauxite and tourism, which are leading sectors in Jamaica, manufacturing has been a following sector. Manufacturing output peaked in the early 1970s along with GDP and has declined in close parallel with it since. In part this reflects the inward-focused and import-substituting nature of the sector. The relatively low labor intensity and the high levels of protection of plastics, paper, electrical equipment, metal fabrication, and machinery industries combined to produce inefficient industries that contracted with the general level of economic activity and provided shrinking numbers of jobs. A surge in manufactured output is one of the key indices of economic growth common to the NICs and other emerging countries. The shrinkage of the Jamaican manufacturing sector is perhaps the best indication of the failure of policies over the last two decades.

Recognition of these problems in the early 1980s did not translate into action until 1983/84. Steps included devaluation and trade reforms, but, as described above, there were many delays and some difficulties persist. The foreign exchange system is central. The overvalued currency discourages the development of the export-oriented manufacturing needed to make the transition from an enclave "following" sector to a growing, job-creating one. The recent closure of the auction and the resulting queues for foreign exchange are a step backwards.

The trade regime needs further work as considerable protection persists despite the removal of some quantitative restrictions. Tariff rates are still high. The duty rebate system will soon be replaced by a more finely tuned drawback mechanism and will lessen the degree of anti-export bias further, but it does not apply to capital goods, and the generally high level of tariffs tends to keep the exchange rate high. In addition, there is a need to reform domestic taxation. Some domestic manufactures bear excises while competing imports do not. Other domestic manufactures pay duties on imported inputs while final goods enter the market duty free.

The apparel subsector is the main success story in the manufacturing sector. Exports grew from US$14 million in 1983 to over US$100 million by 1987. This sector benefitted from the reforms which were implemented, and the preferential access to the U.S. market allowed by the Caribbean Basin Initiative has also been a major factor. Performance elsewhere in the sector has been disappointing. Funds for investment have been a chronic problem in the 1980s. Foreign investment has been weak because of the currency and trade regulations. Domestic investment has been hampered by the high interest rates and by "crowding out" resulting from the need to finance the government deficit. The high interest rates are particularly damaging because of the highly leveraged nature of Jamaican enterprises and the thinness of the local stock market. The success of the Modernization of Industry Program (MIP), which focuses on increasing productivity and upgrading technology used in manufacturing, is made vulnerable by high financial costs of new investment. Even the relatively prosperous garment industry has invested largely in second-hand equipment.

There are other potential areas for manufacturing growth like that of the garment industry. These include footwear, furniture, electronics, and data entry. There is considerable potential for deepening value added in manufacturing in agro-industrial businesses, but these will require more substantial reform in agriculture. Currently, the sector has obsolete equipment and low rates of capacity utilization.

IV. GENDER AND ADJUSTMENT IN THE LONG RUN

It is clear that the reforms in Jamaica are far from complete. It may therefore be useful to make some tentative predictions about how things are likely to evolve in the longer term. There are two aspects to this. First, we will assume that a more complete reform package is implemented and, second, that the transitional forces have a chance to play themselves out. In particular, this means that the government keeps its fiscal position under control, that it crawls out from under the debt load, that the trade and exchange regimes are liberalized, and that the level and distribution of government spending can return to a more normal pattern. It further means that people have time to adjust to the measures in terms of relocating, retraining, and obtaining credit.

In agriculture it is likely that export crops will be favored by reform, and the domestic crop producers will be squeezed. There will be a general tendency for production to switch away from yams and beans toward bananas, citrus, sugar, and cut flowers. Some smallholders may become plantation workers or shift more heavily into those export crops that can be grown on small plots.

It is difficult to build a case that these changes will display marked gender differential patterns. Exactly the same portion of employed women (8 percent) are farm laborers as men. Women are in a minority as smallholders, and it is possible that, among smallholders, women may currently produce more of the domestic crops but there are no firm data to support this claim. Even if there were, the production effects are far from certain. The general assumption is that reform of the trade and exchange regimes will induce a shift from domestic supply to exports. But Jamaica may lose its preferential access to protected banana markets in Europe after 1992 and Jamaica is not among the lowest cost producers. International sugar markets are highly distorted and citrus may not remain competitive with other international suppliers. Moreover, the reduced protection for domestic food crops brought about by changes to tariffs and quotas will be offset by the effects of a lower exchange rate.

What is probably most important here is not the shift in crop composition induced by reforms but the overall performance of agricultural sectors in which women are underrepresented relative to sectors in which women are dominant. If the long-term decline of the agricultural sector is reversed as a result of the reforms, men might benefit more by virtue of their relatively higher participation in the sector, but this is by no means a certainty. Moreover, agriculture sector earnings are among the lowest of any sector, which would make the men's relative gains in this sector less important overall.

One might argue that reductions in production of crops for the domestic market will cut into the traditional trading activities of women. This argument is hard to sustain. Women are already very active as traders of imported goods. In the long run, liberalized trade and foreign exchange rules are likely to increase the volume of trade and open up greater opportunities for those with commercial experience. There may be a tendency toward increased formalization of commercial activities. It is unlikely that this will mean women get squeezed out of commercial activities since they have such a strong position in the markets now. In any event, the demands of debt service will dampen the growth of import trade in the medium term so women should have time to adapt.

The public sector has suffered a long-term decline, which has been particularly hard on women since they are overrepresented in the sector and have traditionally had relatively higher earnings in this sector than in others. Over time, however, the wage rates have fallen and the fiscal restraint necessary as part of the adjustment program has meant a sharp contraction of the sector. In the long run, employment opportunities for women in this sector will be re-established as the fiscal situation improves and wage rates will rise. This is happening already to some degree, but it is clear that the size of the external public debt will continue to limit the scope for public sector growth for some time.

Export-oriented manufacturing offers the promise of increased job opportunities for women, as has already been demonstrated in the garment industry. This will tend to benefit younger women without dependents although these jobs have relatively low wage rates. The proximity to the U.S. market is a strong plus for Jamaica, although a Mexico-U.S. trade deal could have a dampening effect.

On balance then, it seems that women are not likely to lose from adjustment in the longer run and they can potentially gain even more than men. Conditions in the depressed public sector where there are relatively more women can only improve with time. New jobs in export processing industries will be more than proportionately taken up by women. Trade and commercial activity will likely expand with liberalization generating relatively greater benefits for women. Agriculture may suffer, but it is male dominated.

Beyond all these inter- and intra-sectoral shifts, however, the main key to the improvement of women's position is greater general economic growth. Women's unemployment rates are higher than men's. During the adjustment period, their job search rates have shot well ahead of men's. They need jobs, and within fairly broad limits, they are mobile enough to take them wherever new opportunities open up. If structural adjustment can set the stage for renewed growth, women will benefit. Clearly, some of the new job creation will be at the low end of the salary scale. If, however, the growth is effective in lowering unemployment rates generally, women will gain, and they have more to gain than men because it is among poor unemployed and underemployed single women with dependents that the greatest hardship occurs now.

V. THE TRANSITIONAL EFFECTS OF ADJUSTMENT: SOCIAL COSTS

A cursory look at the data shows that the Jamaican economy hit bottom in 1979 and 1980. Agricultural sector GDP was lower than in any year since 1973, manufacturing output was only 70 percent of its level in 1973, commerce was at 58 percent of its previous peak, construction was only 37 percent of its past peak, and other sectors were also down. In 1980 the unemployment rate and the job seeking rates for both men and women shot up to the highest levels ever reached. The following year the female participation rate reached its highest level ever.

Real GDP took another substantial drop in 1984 and 1985. It did not fall to the levels of 1980, but, in per capita terms, it was lower than anything since the 1960s.

In this section, we examine the effects of adjustment in the social dimension. This has been the area on which most existing research has focused. The main concerns in the literature have been that the stabilization phase of adjustment causes an overall economic contraction which has adverse effects on vulnerable groups, including women and children. This tendency is exacerbated by the fact that restraint measures include cuts to government services that are often of relatively greater importance to these key groups. There are two main strands in the literature on this topic. The first is represented by Cornia, Jolly et al. (1987) and Boyd (1988). These studies concentrate on various indicators of socioeconomic well-being over the period from the mid-1970s to the present. There is a smaller substream within this group that focuses on the special changes in women's well-being during the adjustment period and is represented by Harris and Boyd (1988), Horton (1987), and Davies and Anderson (1987). These studies document the changes in income distribution and unemployment and pay particular attention to standards of health, nutrition, education, and other indicators of well-being. The studies broadly conclude that there has been a substantial reduction in living standards during the adjustment period and that the hardship was concentrated among pregnant and lactating women and single mothers and their dependents.

The second strand represented by Behrman and Deolalikar (1989) focuses on the narrower period of 1984-85 when public expenditure was sharply reduced and per capita GDP was at its lowest. The analysis is conducted mainly by statistical techniques that isolate the variations in indicators of well-being in this critical two-year period. They also conclude that hardship was concentrated among the same socioeconomic groups, but that the general reduction in living standards was not nearly as severe as reported by the other authors.

There are no studies that systematically address the "counterfactual" problem. In other words, the studies do not provide evidence on what the level and distribution of suffering would have been if the countries had pursued different adjustment policies. This issue is a critical one since the range of policy options open to Jamaica as it approached the end of the 1970s was very narrow given the fact that it had run out of foreign exchange, and faced an open revolt among its foreign creditors and its domestic industrial managers and entrepreneurs.

A. The Overall Transition Patterns

The following points broadly characterize the transition period.

1. Real GDP per capita dropped by over one fourth from its peak in 1972 to 1980. It recovered slightly over the next three years and then contracted by a further 8 percent over 1984 and 1985. It has risen thereafter. Real consumption expenditure shows a very similar pattern.

2. The first reform effort in 1977 under the IMF was stillborn. The second agreement also fell apart within a year. However, there were devaluations and sharp reductions in real wages in 1978 and 1979 which contributed to the abrogation of the agreement.

3. Unemployment peaked in 1980 with a subsequent lesser peak in 1982. It has declined without interruption since then. This was true for both male and female rates.

4. Although declining through the 1970s, the level of social spending and the indicators of social well-being were both higher than those of many countries with Jamaica's per capita income.

5. Real per capita government expenditures on the five main categories of social spending (education, health, social security, housing, and water) peaked in 1979-80. They remained slightly below peak until 1983 when they were reduced by 20 percent. They fell by a further 20 percent the following year.

Given the general economic contraction associated with monetary and fiscal restraint in 1984 and 1985 and the substantial reductions in social spending, there is suspicion that real human suffering may have resulted. This suspicion in heightened by several other factors.

1. Jamaica has a relatively highly skewed distribution of income and wealth and those at the bottom may be especially vulnerable, even to small changes.

2. The reforms are expected to create new opportunities for growth, but the changes require individuals to adapt. The capacity of different people to do this may vary across socioeconomic groups and in some instances may even be reduced by the reforms themselves.

3. The longer term downward trend in social expenditures may have weakened the effectiveness of the social support system to deal with the special needs of adjustment.

Recognition of the likelihood of a deterioration of living standards of some vulnerable groups was reflected in the first Medium Term Economic Framework (MTEF) presented to the Caribbean Group for Cooperation in Economic Development in December 1987. The following March the government prepared a

blueprint for the reconstruction of its social sector activities. The Social Well-Being Program (SWP) outlined existing social sector programs and defined a package of new programs in health, nutrition, education, and employment which were intended to enhance basic services and protect vulnerable groups. Donor funding for these new initiatives has been sought for the period to 1993/94. The Public Sector Investment Program complements these programs with capital investment projects in the same sectors and for housing and sewage projects.

B. Health

Public spending on health declined by one third between 1982/83 and 1985/86. During this period there were efforts to protect the expenditures for primary health care by compressing the shares for secondary and tertiary care and for drugs and equipment. As a result, stocks have been depleted and there were shortages of medical supplies during hurricane Gilbert. A longer term decline in maintenance and investment was compounded by the cuts in 1984 and 1985 with the result that facilities and equipment have deteriorated significantly.

The most difficult problem, however, is the availability of trained personnel. Working conditions are very unattractive. The numbers of people trained locally are short of needs in most categories, and there are substantial losses to both the private sector and to emigration. (U.S. hospitals actively recruit Jamaican nurses which are in especially short supply.) The sharp cuts to the Ministry of Health (MOH) budget in the mid-1980s undoubtedly had an impact, but, again, serious problems had emerged in the health sector prior to the 1984-85 cuts.

It would appear that the deterioration of health standards has been less marked than that of public health services. Life expectancy is relatively high by developing country standards and is rising. Death rates and infant mortality rates rose during 1984 and 1985 above the levels in 1983, but they are in line with those of previous years. Changes in the incidence of infectious diseases are mixed with some increasing and others decreasing over the critical 1984-85 period, and the changes are relatively small in any event.

The data on health trends are weak, however, and it may be too soon to see the full impact of the 1984-85 expenditure contraction on health standards in any event. What is clear is that the system had deteriorated for over a decade and that substantial improvements are needed or health standards will inevitably suffer.

The health sector accounts for one fourth of the projected spending under the SWP. The government is increasing the emphasis on primary health care, which continues a process begun in 1982/83. Under the terms of the World Bank Social Sectors Development Project, there will be a further 25 percent increase in the share of total MOH expenditures going to primary care by April 1991. This includes rehabilitation of 55 health centers. Secondary care will also be strengthened through projects to refurbish 12 hospitals. These will be complemented by wide-ranging initiatives under the MOH health service rationalization plan, which includes an enhanced pharmaceutical supply system, an improved referral system, privatization of non-health hospital services, new training programs, and implementation of cost recovery measures, including user fees.

The private sector provides a substantial portion of the health care services in Jamaica. In 1983 two thirds of the doctors were exclusively in private practice and 60 percent of those employed by the MOH had private practices as well. The SLC indicates that wealthier Jamaicans are more likely to use private services than are the poor. This would indicate that improvements to the public system run by the MOH would be strongly progressive.

The SWP involves a ten-fold increase in the budget of the MOH over the low level of 1986/87. These improvements are necessary, but there are questions about the ability of the MOH to meet the demands put on it to implement the program, especially given the low level of managerial and administrative capacity resulting from years of shrinking budgets.

The developments in the health sector have three specific gender-differentiated effects. First, women have a relatively greater dependence on the health care system because of their role in childbearing. Second, female-headed households are poorer on average and therefore do not have as ready access to the large private health care system. Third, women are much more heavily employed by the public health care system than are men. It must be recognized, however, that pay levels had deteriorated enough that staffing was already a problem by the time the major cutbacks were implemented.

The government is committed to sustained rehabilitation of the public health care system. The increased funding and the emphasis on primary care should have positive effects for women both as users of the system and as employees.

C. Nutrition

Per capita expenditure on food fell by 25 percent between 1977 and 1980 and has remained at roughly that level since (Behrman and Deolalikar, p. 153). The reduction is largely the result of the devaluation and the rise in the price of imported foods. Wage increases do not match the rise in food prices with the result that real wages fell 20 percent for men and 25 percent for women in 1978. Much of the price rise was concentrated in key food commodities as is documented extensively by Boyd (1988). The main World Bank study on the effects of adjustment in Jamaica (Behrman and Deolalikar, 1989) deals only with the post-1980 period during which the World Bank had SAL programs in effect. It misses the period when consumption expenditure contracted the most. Instead, it focuses on the changes in nutrition during 1984-85 noting that there was little change over this period.

The contraction in 1978-80 led to a shift in the composition of food consumption with greater emphasis on staples. This reflects the need to increase the nutritive value of food purchases per dollar available. The devaluation during this period caused a shift away from imported food toward domestic food crops. Per capita GDP in domestic agriculture actually rose to a peak in 1978. It dropped again as foreign currency was made available by the World Bank and the IMF during the early 1980s.

Malnutrition in young children rose in 1979 and again in 1980 and 1981. It fell back temporarily and then rose to a new peak in 1986. It therefore correlates closely with the changes in per capita income. However, this pattern is not evident in the data on gastroenteritis. Moreover, the Gomez scores, which attained peaks in

1978-79, showed steady improvement through the 1980s, including the period of sharp economic contraction in 1984 and 1985.* This conforms with the data on consumption expenditure which tended steadily upward after 1980.

It would seem then that the economic contraction in 1980 had a more severe impact on nutrition than the relatively larger one in 1984-85. In part, this is due to the government's three food and nutrition programs.

The Food Stamp Program was begun in 1984 as part of the government Foods Security Program. It allows beneficiaries to buy cornmeal, rice, and dried skim milk. The program is well targeted, covering pregnant and lactating mothers and children under five who receive care at public health clinics; families whose head earns less than US$50 per week; people on public assistance; and those on poor relief assistance. This program is being expanded under the SWP. In 1989/90 the program will generate benefits of US$14 million that will be distributed to recipients in installments of J$40 every other month. The SWP also includes projects to improve the monitoring and control of the Food Stamp Program so that targeting can be enhanced.

The School Lunch program was introduced in 1983 and was intended to provide 30 percent of the protein requirements of 170,000 pre-school and primary school students. The program has been judged successful in enhancing dietary intake. Under the SWP, it will be expanded to cover all primary and all-age schools. Pre-primary schools will continue to be covered by cash subsidy arrangements.

There is a small clinical supplementation program that distributes food to malnourished children. This program will be expanded under the SWP with efforts to reach those malnourished children who are not regularly brought to clinics.

The General Food Subsidy (GFS) program was implemented in 1986 to offset the effects of the devaluation on the prices of imported foods, including wheat flour, cornmeal, and skim milk powder. This program is of greater benefit to the rich than the poor since the poor spend less on food than the rich. The richest 20 percent of the population derives about 60 percent more of the value of the subsidies than the poorest 20 percent. Under the SWP, the government is planning to phase out this program by 1992, replacing it with better targeted programs. In expanding, the nutrition programs are to focus on the more depressed southern region first and spread to other regions as funds and planning capacity allow.

On balance, it would seem that Jamaica experienced a deterioration of nutrition standards during the adjustment period but that the government's programs have ameliorated it to some degree. The initiatives under the SWP have provided important further improvements. The World Bank's Survey of Living Standards conducted annually since 1988 indicates that malnutrition has dropped significantly among children under 5 (from 14.6 percent in 1985 to 9.2 percent in 1989). There is clearly room for further improvements, but the successes so far are at least partly attributable to the increases in scope of the program and the more effective targeting of resources. Again, the main constraints are likely to be in the government's ability to plan and manage the

*Gomez scores are an indicator of nutrition standards based on weight for age. The higher the score, the lower the weight relative to international standards for that age group.

program. The Food Stamps Program suffered setbacks between 1988 and 1989 in terms of progressivity and coverage, especially of malnourished children. According to reports based on the SLC, these children are reached by the public health care system, but improvements are needed in the registration procedures for food stamps.

As in the case of health, the higher incidence of poverty and the relatively greater responsibility for child rearing makes women relatively more dependent on public efforts to sustain levels of nutrition. Unlike the health care system, however, nutrition programs were initiated and enhanced through the period of greatest restraint. Furthermore, they have been better focused on poorer women and women with young children. Over 50 percent of those in the lowest quintile received food stamps as opposed to 6 percent in the highest, and 72 percent of pregnant and lactating females in the lowest quintile received them as opposed to 4 percent in the highest.

There is some limited evidence on the relative propensities of men and women to spend income on family food. One study (Horton and Miller forthcoming) suggests that there is a weak tendency for women to express a greater concern for basic needs and for children at least as far as food quality is concerned. The actual amounts spent show very little gender difference.

D. Education

Education follows very much the same pattern as health. Jamaica had a good system that has been allowed to deteriorate over time. Currently, 80 percent of children complete primary school as compared with 95 percent in similar developing countries, and enrollment in higher education is only half that of the other countries. Moreover, the quality of education as measured in standardized tests lags significantly at primary and secondary levels. Although the situation may have worsened in 1984-85, the problems are long-standing ones.

Physical facilities in schools are inadequate, as reflected in overcrowding and poor water and sewerage. Textbooks and other teaching aids are in short supply. Teacher morale is low and training is poor. Salaries are low and declined sharply during the reform period. Despite this fact, salaries still form a much higher portion of total school costs than in developed countries. With these problems, attendance and achievement are low.

The Ministry of Education (MOE) is very poorly positioned to deal with these problems. It is seriously understaffed, and the better qualified and motivated staff have been leaving for better paying jobs in the private sector and abroad for over a decade. The degree to which these problems are the result of specific adjustment measures and the degree to which they result from broader and longer term trends is perhaps not as important as simply recognizing that the problems exist and formulating plans to deal with them.

The SWP addresses these problems although it must be recognized that the situation will not be turned around over night. The program includes improvements to MOE's management and planning capability, incentives for teachers, upgrading of primary and pre-primary schools, textbooks and teaching materials, performance assessment and curriculum development. Throughout, the emphasis is to provide better primary schooling since this is the only education many children will get and because many secondary school entrants are currently inadequately prepared.

These programs represent roughly a doubling of investment over the levels of 1986/87 to a total of about J$800 million over five years. In some sense, this may not be adequate, but, as in the health and nutrition components of the SWP, the proposed projects are good ones and it is probably not practical to proceed faster. The MOE may be overburdened as it is.

Education is a relatively important factor for women in securing employment in better paying jobs in the public sector and as clerks and secretaries. Overall enrollment rates are higher for women than for men, but it is probably not fair to assert that women as students were more seriously affected by education sector cutbacks than were men. However, women make up the vast majority of teachers, and, from this perspective, they have suffered more than proportionately, not only in terms of salaries which had been declining for some years, but also in terms of workloads and working conditions.

VI. THE TRANSITIONAL EFFECTS OF ADJUSTMENT: THE SUPPLY RESPONSE

The section titled Gender and Adjustment in the Long Run outlined what the potential benefits and costs of adjustment would be for women once the policy changes have had a chance to fully work through the system. The expectation is that only after the appropriate policies are in place can there be sustained economic growth that will benefit both women and men. The question addressed in this section is how far this supply response has progressed and what male-female differences are being experienced as it evolves.

It is important to put the supply response issue in context. Substantial economic deterioration had already taken place by 1977 when the first discussion about adjustment took place with the IMF. The first agreement collapsed and a second three-year extended Fund facility replaced it. The agreement held for only one year during which some progress was made and GDP grew again in 1978 for the first time in four years. However, because of the devaluation, real wage rates fell by 20 percent for men and by 25 percent for women. This adjustment was necessary to restore wages to levels compatible with Jamaican productivity and external balance, but they proved too abrupt, and the following political upheaval caused the IMF agreement to be abandoned in December 1979. Sharp wage rises were granted and high levels of deficit spending were financed by the domestic banking system.

This pattern of events emphasizes two difficulties which arise in analyzing the supply response. The first is the fact that adjustment measures are rarely taken completely and at once. The reluctance of the Jamaican government to react to fiscal imbalances, the reversals on wage policies and public sector expenditure, the buildup of external debt, the delays in making appropriate exchange rate adjustments, and the consequent need to keep domestic interest rates high have created serious problems. They have increased the costs of adjustment and they have lengthened the necessary period of adjustment as the debt overhang and high domestic real interest rates continue to exert a drag on the economy.

The second IMF agreement showed promise during 1978. The devaluation and the adjustment in real wages were able to substantially arrest the trend of negative growth. Had the government been able to maintain these policies, and to reduce the deficit, subsequent more drastic adjustment measures might not have been needed. Over the period from 1980 to 1983, Jamaica borrowed heavily from the IMF and the World Bank under various adjustment programs, but did very little to make fundamental changes. The infusion of this money kept the economy from sliding further into recession, but the long-run prospects for renewed growth were compromised by the lack of concrete action.

The second factor complicating the analysis of adjustment measures and supply responses is the changing external environment. The failure of the second IMF agreement was due partly to the effects of the first oil shock and rising international interest rates. The second oil shock and deteriorating conditions in the bauxite market were largely responsible for the collapse of the economy in 1984 and 1985 and the unravelling of the adjustment agreements. Since then, there has been favorable movement in most economic indicators, but one must be careful to distinguish the independent effects of the reforms themselves and those of other external factors.

A. Employment

The employment picture improved through the period since 1980. Increases were concentrated in manufacturing--largely garments--and in construction. The growth of the garments subsector perhaps more than any other can be fairly directly attributed to adjustment measures. There were decreases in mining, agriculture, and public administration. Between 1980 and 1987, 156,000 new jobs were created. In general, there has been a shift toward more labor-intensive production. This reflects to some degree the effects of the economic reforms as Jamaica concentrates in areas of true comparative advantage rather than in protected import-substituting sectors.

Changes in the labor force activity of men and women are quite similar although movements for women were more pronounced. The unemployment rates for both peaked in 1982 and have declined since. Women's unemployment rate dropped from 41 percent in 1982 to 30 percent in 1987, while the men's rate declined less sharply from 16 percent to 13 percent. Women also joined the labor force relatively faster than men. The female labor force participation rate rose steadily from 60 percent in the mid-1980s to a peak of 66 percent in 1981. It peaked again in 1984. This counter-cyclical shifting into the labor force during recession and out again during recovery suggests that women were trying to compensate for lower family incomes. Men's labor force participation, by contrast, shows a very gradual decline through the whole period.

In terms of employment, women gained more than men. Between 1980 and 1987, there were 25 percent more jobs for women as opposed to 21 percent for men. Between 1982 and 1987, the difference is even more marked--19 percent for women as compared with 12 percent for men. However, the relative employment gains of women are not all that dramatic. Women's share of total employment has climbed slowly from 38 percent in 1975 to 40 percent in 1987.

Table 1.6 shows indices of real GDP by sector, as well as data on the number of women employed in each sector. The purpose is to show that the higher growth in employment for women is attributable to the relatively faster growth of "female- intensive" sectors rather than increasing proportions of female employees across sectors generally. In particular, using the 1980=100 index, agriculture and mining are low growth sectors in which women have low representation, and commerce and services are high growth sectors in which women are highly concentrated. The results are not uniform though. The highly volatile construction industry grew rapidly after 1980 and is a male-dominated industry. Similarly, transportation provided growth for male employment, and there were net losses for women in the contracting government sector. Manufacturing is a high growth sector and is male dominated. However, the share of jobs going to women in this sector has been rising. Manufacturing is unique in this respect. Generally, the male-female shares are very steady over time within sectors and within occupational classes.

Tables 1.7, 1.8, 1.9, and 1.10 show the occupational distribution of women's employment and unemployment since 1975. The data display a remarkable stability. There has been an upward trend in the numbers of women working as craftsmen and operators. This is again part of the garment industry expansion and is concentrated in the years since 1985. There has been a significant decline in the percentage of unskilled manual workers who are female since 1982. It is probable that some of these women are shifting into the craftsmen and operator group where they will earn slightly higher wages and will have somewhat better job security. These shifts are likely to be permanent rather than short-term recession-related changes.

TABLE 1.6: JAMAICA

DISTRIBUTION OF FEMALE EMPLOYMENT, 1975-88

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	A	B
								Index 1975=100								
Agriculture	100	100	103	113	102	97	99	92	98	108	104	102	108	103	23	19
Mining	100	79	94	96	94	104	104	75	75	76	61	65	68	65	14	0
Manufacturing	100	96	88	84	80	71	72	77	79	75	76	78	82	83	31	12
Electricity	100	104	100	104	100	104	104	109	117	117	122	135	148	143	-	-
Construction	100	80	64	65	65	47	47	55	58	54	49	51	58	66	2	0
Commerce	100	81	75	74	71	75	79	85	83	82	76	81	89	89	67	24
Transportation	100	96	90	90	90	86	88	88	93	96	97	107	115	117	20	2
Financial services	100	101	103	102	105	104	108	111	120	120	115	112	116	120	66	-
General government	100	116	124	130	136	133	135	139	140	134	126	122	122	126	57	13
Other services	100	94	92	89	83	51	52	54	53	54	55	57	60	61	66	30
TOTAL	**100**	**94**	**91**	**92**	**90**	**85**	**87**	**88**	**90**	**90**	**85**	**87**	**92**	**94**	**40**	**100**
								Index 1980=100								
Agriculture	103	103	106	116	105	100	102	94	101	111	107	105	110	105	23	19
Mining	96	76	90	92	91	100	101	72	72	73	58	63	66	63	14	0
Manufacturing	141	135	125	119	112	100	101	109	111	106	106	110	116	117	31	12
Electricity	96	100	96	100	96	100	100	104	113	113	117	129	142	138	-	-
Construction	213	171	135	139	138	100	100	116	123	115	105	108	123	141	2	0
Commerce	133	108	100	98	95	100	105	114	110	110	101	108	119	119	67	24
Transportation	116	111	104	105	105	100	102	102	108	111	113	124	133	135	20	2
Financial services	96	97	99	98	101	100	104	107	115	115	111	107	111	116	66	-
General government	75	87	93	98	103	100	102	105	105	101	95	91	92	95	57	13
Other services	196	185	181	174	162	100	101	105	104	105	108	111	118	119	66	30
TOTAL	**118**	**110**	**107**	**108**	**106**	**100**	**102**	**104**	**106**	**105**	**100**	**102**	**108**	**110**	**40**	**100**

A = Percentage of Employed Workers in Each Industry That Are Female.
B = Percentage of Employed Females in Each Industry.

SOURCE: LABOUR FORCE SURVEY.

TABLE 1.7: JAMAICA

EMPLOYED LABOR FORCE BY OCCUPATION, 1975-87

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
						Both Sexes 000's							
Professional, Technical Administrative, Executive, Managerial	60	57	60	62	62	61	61	65	82	68	63	56	63
Clerical and Sales	81	83	79	86	78	80	81	78	87	89	86	88	97
Self-Employed	241	250	257	274	283	281	309	312	287	319	334	338	343
Services	83	81	77	81	88	87	86	88	99	109	102	108	109
Craftsmen, Operators	100	95	88	83	88	78	83	86	102	102	95	106	123
Unskilled Manual	95	111	105	107	101	91	101	99	76	90	100	98	98
Not Specified	3	2	1	2	2	2	2	3	2	2	2	1	3
TOTAL	663	679	667	695	702	680	723	731	735	779	782	795	836
						Female							
Professional, Technical Administrative, Executive, Managerial	32	31	33	35	35	35	35	36	41	37	36	33	36
Clerical and Sales	46	49	46	49	47	47	47	45	50	53	51	54	60
Self-Employed	82	80	83	88	87	85	101	104	99	108	110	113	108
Services	60	57	53	55	59	58	58	60	65	72	68	73	75
Craftsmen, Operators	10	10	10	9	11	8	9	10	11	12	12	16	25
Unskilled Manual	22	35	38	38	35	32	34	25	17	24	27	27	28
Not Specified	1	0	0	0	0	1	1	1	1	1	1	1	1
TOTAL	253	262	263	274	274	266	285	281	284	307	305	317	333
						Male							
Professional, Technical Administrative, Executive, Managerial	28	26	27	27	27	26	26	29	41	31	27	23	27
Clerical and Sales	35	34	33	37	31	33	34	33	37	36	35	34	37
Self-Employed	159	170	174	186	196	196	208	208	188	211	224	225	235
Services	23	24	24	26	29	2[illegible]	28	28	34	37	34	35	34
Craftsmen, Operators	90	85	78	74	77	70	74	76	91	90	83	90	98
Unskilled Manual	73	76	67	69	66	59	67	74	59	66	73	71	70
Not Specified	2	2	1	2	2	1	1	2	1	1	1	0	2
TOTAL	410	417	404	421	428	414	438	450	451	472	477	478	503

SOURCE: LABOUR FORCE SURVEY.

TABLE 18: JAMAICA

OCCUPATIONAL DISTRIBUTION OF FEMALE EMPLOYMENT, 1975-87

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
	Percent of Employed Workers in Each Occupation That Are Female												
Professional, Technical Administrative, Executive, Managerial	53	54	55	56	56	57	57	55	50	54	57	59	57
Clerical and Sales	57	59	58	57	60	59	58	58	57	60	59	61	62
Self-Employed	34	32	32	32	31	30	33	33	34	34	33	33	31
Services	72	70	69	68	67	67	67	68	66	66	67	68	69
Craftsmen, Operators	10	11	11	11	13	10	11	12	11	12	13	15	20
Unskilled Manual	23	32	36	36	35	35	34	25	22	27	27	28	29
Not Specified	33	0	0	0	0	50	50	33	50	50	50	100	33
TOTAL	38	39	39	39	39	39	39	38	39	39	39	40	40
	Percent of Employed Females in Each Occupation												
Professional, Technical Administrative, Executive, Managerial	13	12	13	13	13	13	12	13	14	12	12	10	11
Clerical and Sales	18	19	17	18	17	18	16	16	18	17	17	17	18
Self-Employed	32	31	32	32	32	32	35	37	35	35	36	36	32
Services	24	22	20	20	22	22	20	21	23	23	22	23	23
Craftsmen, Operators	4	4	4	3	4	3	3	4	4	4	4	5	8
Unskilled Manual	9	13	14	14	13	12	12	9	6	8	9	9	8
Not Specified	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100

SOURCE: LABOUR FORCE SURVEY.

TABLE 1.9: JAMAICA

UNEMPLOYED LABOR FORCE BY OCCUPATION, 1975-87

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
						Both Sexes 000's							
Professional, Technical Administrative, Executive, Managerial	3	3	6	6	6	6	5	6	26	8	6	6	5
Clerical and Sales	13	17	23	22	21	26	27	25	24	26	28	26	20
Self-Employed	12	14	17	17	16	19	21	23	11	12	13	15	11
Services	38	42	45	42	48	53	50	54	43	51	45	47	41
Craftsmen, Operators	21	26	32	25	28	32	26	25	25	32	32	34	26
Unskilled Manual	25	23	38	32	29	28	33	28	21	27	21	24	17
Not Specified	1	1	0	0	1	2	0	0	6	1	3	3	6
No Previous Job	54	49	56	62	74	99	96	110	100	109	104	110	98
TOTAL	167	175	217	206	223	265	258	271	256	266	252	265	224
						Female							
Professional, Technical Administrative, Executive, Managerial	3	2	4	4	5	5	4	5	18	6	4	4	4
Clerical and Sales	10	14	18	18	18	21	23	20	19	22	23	20	14
Self-Employed	8	9	10	11	10	11	13	14	8	9	8	9	6
Services	35	40	40	40	45	49	47	50	38	47	38	42	36
Craftsmen, Operators	6	7	8	7	8	9	7	6	8	8	8	10	10
Unskilled Manual	13	12	19	19	17	14	17	14	9	11	8	11	7
Not Specified	1	0	0	0	1	1	0	0	4	1	2	2	4
No Previous Job	40	35	40	48	54	69	71	80	68	74	75	73	70
TOTAL	116	119	139	147	158	179	182	189	172	178	166	171	151
						Male							
Professional, Technical Administrative, Executive, Managerial	0	1	2	2	1	1	1	1	8	2	2	2	1
Clerical and Sales	3	3	5	4	3	5	4	5	5	4	5	6	6
Self-Employed	4	5	7	6	6	8	8	9	3	3	5	6	5
Services	3	2	5	2	3	4	3	4	5	4	7	5	5
Craftsmen, Operators	15	19	24	18	20	23	19	19	17	24	24	24	16
Unskilled Manual	12	11	19	13	12	14	16	14	12	16	13	13	10
Not Specified	0	1	0	0	0	1	0	0	2	0	1	1	2
No Previous Job	14	14	16	14	20	30	25	30	32	35	29	37	28
TOTAL	51	56	78	59	65	86	76	82	84	88	86	94	73

SOURCE: LABOUR FORCE SURVEY.

TABLE L10: JAMAICA

OCCUPATIONAL DISTRIBUTION OF FEMALE UNEMPLOYMENT, 1975-87

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
	Percent of Unemployed Workers in Each Occupation That Are Female												
Professional, Technical Administrative, Executive, Managerial	100	67	67	67	83	83	80	83	69	75	67	67	80
Clerical and Sales	77	82	78	82	86	81	85	80	79	85	82	77	70
Self-Employed	67	64	59	65	63	58	62	61	73	75	62	60	55
Services	92	95	89	95	94	92	94	93	88	92	84	89	88
Craftsmen, Operators	29	27	25	28	29	28	27	24	32	25	25	29	38
Unskilled Manual	52	52	50	59	59	50	52	50	43	41	38	46	41
Not Specified	100	0	0	0	100	50	0	0	67	0	67	67	67
No Previous Job	74	71	71	77	73	70	74	73	68	68	72	66	71
TOTAL	69	68	64	71	71	68	71	70	67	67	66	65	67
	Percent of Unemployed Females in Each Occupation												
Professional, Technical Administrative, Executive, Managerial	3	2	3	3	3	3	2	3	10	3	2	2	3
Clerical and Sales	9	12	13	12	11	12	13	11	11	12	14	12	9
Self-Employed	7	8	7	7	6	6	7	7	5	5	5	5	4
Services	30	34	29	27	28	27	26	26	22	26	23	25	24
Craftsmen, Operators	5	6	6	5	5	5	4	5	5	4	5	6	7
Unskilled Manual	11	10	14	13	11	8	9	7	5	6	5	6	5
Not Specified	1	0	0	0	1	1	0	0	2	1	1	1	3
No Previous Job	34	29	29	33	34	39	39	42	40	42	45	43	46
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100

SOURCE: LABOUR FORCE SURVEY.

The proportion of the self-employed who are women increased between 1981 and 1986 but is now back at the historical levels. This is more likely the effect of women turning to higgling during the hard times than an indication of new permanent employment patterns attributable to structural reform. There was a slight increase in the proportion of women employed in services and in clerical and sales jobs after 1982, but all the changes are small and do not achieve rates out of the range established since 1975.

Tables 1.11, 1.12, 1.13, and 1.14 show the sectoral distribution of female employment and unemployment since 1975. Again, the patterns are very stable. Women have gradually been leaving agriculture. They have increased their share of manufacturing and of public administration. There has been a slight increase in commerce as well, but, again, all the shifts are small.

The conclusion to be drawn from these data is that during the height of the restraint period, women entered the labor force in larger numbers than men probably to compensate for losses in family income. In addition, there was a shift in the numbers of passive unemployed women to active seekers. Women turned to service sector jobs like domestic service and higgling to earn extra income during the recession. Once one removes these transitional shifts from the data, one sees that, relative to men, women are becoming more concentrated in public service and in manufacturing and are moving out of agriculture. These shifts are consistent with the patterns that are expected to emerge as the long-run consequences of structural reform. However, there are several important qualifications.

First, all the changes are small. Relative growth rates of different sectors seem to be the most important factor in creating the modest increase in overall female employment. With the exception of manufacturing, there is no tendency for increased female employment within individual sectors. However, the stability of male-female ratios within sectoral and occupational groups could break down under higher growth and levels of labor demand. Women are present in significant numbers (over 20 percent) in all sectors except construction and mining. Barriers to female entry are not that great. The potential mobility of women between sectors and occupations suggests that even if "male" sectors were to enjoy relative expansion, the employment opportunities would not necessarily accrue disproportionately to men (Table 1.7).

Another important issue is that although the Jamaican economy has grown at about 2 percent a year since 1985, its real GDP is still well below levels reached in the 1970s. Clearly, the country has only gone a very short way down the road to capturing the benefits of structural reform. Even if we were to anticipate marked male-female differences, they would not yet have emerged.

B. Wages

Data on wages are more sketchy. A comparison of changes in the official wage guidelines with changes in consumer prices suggests that real wages declined sharply in 1984 and 1985. However, it is likely that the guidelines were not strictly observed.

The data from the Labour Force Survey also suggest that median real wages dropped in 1984 and 1985, but the 1983 rates were exceptionally high. Real median wage rates in 1984-85 were actually higher than in 1978-82. More importantly, the same data indicate that there were significant reductions in real wage rates among the lower wage rate categories. This reinforces the notion that adjustment has caused stress among the

TABLE 1.11: JAMAICA

SECTORAL DISTRIBUTION OF EMPLOYMENT, 1975-87

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
						Both Sexes							
Agriculture	217	249	239	260	254	252	275	263	244	261	280	278	274
Mining	8	7	7	6	7	7	7	9	9	8	7	5	7
Manufacturing	72	73	75	76	73	69	76	83	87	95	97	104	125
Construction	44	39	32	30	36	24	25	31	35	31	32	30	41
Transportation	31	29	26	27	28	32	30	31	34	37	36	35	40
Commerce	80	76	85	92	87	86	97	97	107	107	112	123	119
Public Administration	97	103	107	109	105	103	100	99	101	100	83	76	75
Other Services	109	100	90	93	108	101	110	113	116	136	133	142	151
Not Specified	4	3	3	3	4	6	3	7	2	1	2	3	4
TOTAL	**662**	**679**	**664**	**696**	**702**	**680**	**723**	**733**	**735**	**776**	**782**	**796**	**836**
						Female							
Agriculture	49	65	61	68	60	60	70	61	57	64	67	64	62
Mining	1	1	1	1	1	1	1	2	1	1	1	1	1
Manufacturing	19	19	20	19	19	17	18	20	22	23	24	30	39
Construction	1	1	1	1	1	1	1	1	1	1	1	1	1
Transportation	7	7	6	7	7	8	5	6	7	8	7	5	8
Commerce	52	48	57	59	60	58	65	65	67	70	73	81	80
Public Administration	48	54	54	55	55	54	51	53	52	51	44	40	43
Other Services	75	70	60	64	71	66	72	71	77	90	88	96	99
Not Specified	1	1	1	1	1	2	1	2	1	1	1	2	2
TOTAL	**253**	**266**	**261**	**275**	**275**	**267**	**284**	**281**	**285**	**309**	**306**	**320**	**335**
						Male							
Agriculture	168	184	178	192	194	192	205	202	187	197	213	214	212
Mining	7	6	6	5	6	6	6	7	8	7	6	4	6
Manufacturing	53	54	55	57	54	52	58	63	65	72	73	74	86
Construction	43	38	31	29	35	23	24	30	34	30	31	29	40
Transportation	24	22	20	20	21	24	25	25	27	29	29	30	32
Commerce	28	28	28	33	27	28	32	32	40	37	39	42	39
Public Administration	49	49	53	54	50	49	49	45	49	49	39	36	32
Other Services	34	30	30	29	37	35	38	42	39	46	45	46	52
Not Specified	3	2	2	2	3	4	2	5	1	0	1	1	2
TOTAL	**409**	**413**	**403**	**421**	**427**	**413**	**439**	**452**	**450**	**467**	**476**	**476**	**501**

SOURCE: LABOUR FORCE SURVEY.

TABLE 1.12: JAMAICA

SECTORAL DISTRIBUTION OF FEMALE EMPLOYMENT, 1975-87

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
	Percent of Employed Workers in Each Industry That Are Female												
Agriculture	23	26	26	26	24	24	25	23	23	25	24	23	23
Mining	13	14	14	17	14	14	14	22	11	13	14	20	14
Manufacturing	26	26	27	25	26	25	24	24	25	24	25	29	31
Construction	2	3	3	3	3	4	4	3	3	3	3	3	2
Transportation	23	24	23	26	25	25	17	19	21	22	19	14	20
Commerce	65	63	67	64	69	67	67	67	63	65	65	66	67
Public Administration	49	52	50	50	52	52	51	54	51	51	53	53	57
Other Services	69	70	67	69	66	65	65	63	66	66	66	68	66
Not Specified	25	33	33	33	25	33	33	29	50	100	50	67	50
TOTAL	38	39	39	40	39	39	39	38	39	40	39	40	40
	Percent of Employed Females in Each Industry												
Agriculture	19	24	23	25	22	22	25	22	20	21	22	20	19
Mining	0	0	0	0	0	0	0	1	0	0	0	0	0
Manufacturing	8	7	8	7	7	6	6	7	8	7	8	9	12
Construction	0	0	0	0	0	0	0	0	0	0	0	0	0
Transportation	3	3	2	3	3	3	2	2	2	3	2	2	2
Commerce	21	18	22	21	22	22	23	23	24	23	24	25	24
Public Administration	19	20	21	20	20	20	18	19	18	17	14	13	13
Other Services	30	26	23	23	26	25	25	25	27	29	29	30	30
Not Specified	0	0	0	0	0	1	0	0	0	0	0	1	1
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100

SOURCE: LABOUR FORCE SURVEY.

TABLE 1.13: JAMAICA

SECTORAL DISTRIBUTION OF UNEMPLOYMENT, 1975-87

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
							Both Sexes						
Agriculture	11	12	18	18	13	13	13	16	26	9	7	10	8
Mining	1	1	1	1	1	0	1	1	1	0	1	1	1
Manufacturing	14	18	23	18	19	23	22	20	23	24	25	27	24
Construction	12	13	18	15	14	13	12	12	10	16	15	13	10
Transportation	4	4	5	4	4	6	5	5	6	7	7	6	5
Commerce	11	12	15	15	15	17	18	19	16	18	19	20	15
Public Administration	14	16	29	27	28	26	34	28	23	22	19	19	13
Other Services	45	47	51	47	54	62	55	58	46	59	51	55	45
Not Specified	2	2	1	1	2	4	2	2	6	2	3	4	7
No Previous Job	54	49	56	62	74	99	96	109	100	109	104	111	98
TOTAL	**168**	**174**	**217**	**208**	**224**	**263**	**258**	**270**	**257**	**266**	**251**	**266**	**226**
							Female						
Agriculture	6	6	9	11	6	6	7	9	16	5	3	6	4
Mining	0	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	8	10	13	10	10	12	11	11	13	13	13	13	14
Construction	1	1	1	1	1	1	0	1	1	1	0	1	0
Transportation	1	1	1	1	1	2	1	2	2	3	2	3	1
Commerce	9	9	11	11	12	12	15	14	12	13	15	14	10
Public Administration	9	11	20	19	22	18	25	19	15	17	13	11	9
Other Services	41	44	44	44	50	56	50	54	41	52	43	48	39
Not Specified	1	1	1	0	1	3	1	1	5	1	2	2	4
No Previous Job	40	35	40	48	54	69	71	81	67	74	75	73	70
TOTAL	**116**	**118**	**140**	**145**	**157**	**179**	**181**	**192**	**172**	**179**	**166**	**171**	**151**
							Male						
Agriculture	5	6	9	7	7	7	6	7	10	4	4	4	4
Mining	1	1	1	1	1	0	1	1	1	0	1	1	1
Manufacturing	6	8	10	8	9	11	11	9	10	11	12	14	10
Construction	11	12	17	14	13	12	12	11	9	15	15	12	10
Transportation	3	3	4	3	3	4	4	3	4	4	5	3	4
Commerce	2	3	4	4	3	5	3	5	4	5	4	6	5
Public Administration	5	5	9	8	6	8	9	9	8	5	6	8	4
Other Services	4	3	7	3	4	6	5	4	5	7	8	7	6
Not Specified	1	1	0	1	1	1	1	1	1	1	1	2	3
No Previous Job	14	14	16	14	20	30	25	28	33	35	29	38	28
TOTAL	**52**	**56**	**77**	**63**	**67**	**84**	**77**	**78**	**85**	**87**	**85**	**95**	**75**

SOURCE: LABOUR FORCE SURVEY.

TABLE 1.14: JAMAICA

SECTORAL DISTRIBUTION OF FEMALE UNEMPLOYMENT, 1975-87

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
	Percent of Unemployed Workers in Each Industry That Are Female												
Agriculture	55	50	50	61	46	46	54	56	52	56	43	60	50
Mining	0	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	57	56	57	56	53	52	50	55	57	54	52	48	58
Construction	8	8	6	7	7	8	0	8	10	6	0	8	0
Transportation	25	25	20	25	25	33	20	40	33	43	29	50	20
Commerce	82	75	73	73	80	71	83	74	75	72	79	70	67
Public Administration	64	69	69	70	79	69	74	68	65	77	68	58	69
Other Services	91	94	86	94	93	90	91	93	89	88	84	87	87
Not Specified	50	50	100	0	50	75	50	50	83	50	67	50	57
No Previous Job	74	71	71	77	73	70	74	74	67	68	72	66	71
TOTAL	**69**	**68**	**65**	**70**	**70**	**68**	**70**	**71**	**67**	**67**	**66**	**64**	**67**
	Percent of Unemployed Females in Each Industry												
Agriculture	5	5	6	8	4	3	4	5	9	3	2	4	3
Mining	0	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	7	8	9	7	6	7	6	6	8	7	8	8	9
Construction	1	1	1	1	1	1	0	1	1	1	0	1	0
Transportation	1	1	1	1	1	1	1	1	1	2	1	2	1
Commerce	8	8	8	8	8	7	8	7	7	7	9	8	7
Public Administration	8	9	14	13	14	10	14	10	9	9	8	6	6
Other Services	35	37	31	30	32	31	28	28	24	29	26	28	26
Not Specified	1	1	1	0	1	2	1	1	3	1	1	1	3
No Previous Job	34	30	29	33	34	39	39	42	39	41	45	43	46
TOTAL	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

SOURCE: LABOUR FORCE SURVEY.

poorer wage earners. By contrast, there do not appear to have been significant changes in the income of people engaged in small-scale, non-export agriculture. This is significant because this sector includes many of the poorest Jamaicans.

Conclusions about male-female differences in wages are a bit difficult to make. Table 1.15 shows the relative proportions of male and female labor forces in various earnings ranges. The ratio for those earning over J$50 per week was very steady from 1980 to 1985 with the male rate about 30 percent over the female rate. Then in 1986 and 1987 the male premium sagged to 18 percent and then 10 percent. One should not read too much into these numbers, however, as the proportions for both males and females fell dramatically in 1986.

It would be interesting to compare the relative wages of men and women at the low end. Table 1.15 shows a weak tendency for women to become relatively more concentrated in the under J$20 category. However, the changes are not uniform over time and since the data are measured in nominal terms, there will be a tendency for women to become more concentrated in fixed lower brackets as nominal incomes rise even if real income distributions are not changing. On balance, it does not appear that there have been marked differences in the evolution of real wages for men and for women. There may have been a tendency for women to gain relative to men in the upper income groups and to lose relative to men in the lower income groups, but this tendency is at most a weak one and difficult to verify with existing data. Far more important in the overall picture is the fact that everyone's real wages declined sharply in the 1984-85 period. Differences in the percentage drops in male and female earnings are not as significant as the fact that women start from a lower base so the losses are more sharply felt.

C. Overall Growth

In the section on long run adjustment, it was argued that women have as much or more to gain from adjustment as men. It was also argued that higher general economic growth is perhaps more important than improvements in any particular sector. Women are relatively mobile in Jamaica. Being concentrated in the lower-income groups and among the unemployed makes an increase in general employment opportunities even more critical for them than for men. As yet, most of the hoped-for growth remains in the future. If one uses simple trend-cycle projections of gender ratios in each industrial sector and combines that with similar projections of GDP per sector, one finds very little improvement in the overall ratio of male to female employment. This is in spite of relatively rapid growth in manufacturing and an increasing relative role for women in manufacturing.

The pace at which the future growth materializes depends very much on external circumstances. It is critical to realize that in the longer term structural adjustments are necessary but not sufficient to guarantee growth. There has been modest growth since 1985, but these improvements are largely due to softening world oil prices and a firming of bauxite markets. The growth in the garments subsector is partly attributable to the relaxation of trade and exchange restrictions, but it has received a major boost from the Caribbean Basin Initiative. Even if the Jamaica government vigorously pursues reforms, the economy could suffer major setbacks. The price of oil is already rising with the new Middle East crisis. If there is a world recession (as many economists are predicting), the price of bauxite will fall. Aluminum is a key input to military hardware as well, and with the shrinkage of U.S.-U.S.S.R. tensions, there could be a further slackening of demand. The advent of European market integration in 1992 may cut off Jamaica's preferential access to important banana markets. International sugar markets are completely artificial and could change in any direction depending on negotiated terms.

TABLE 1.15: JAMAICA
PERCENTAGE DISTRIBUTION OF EMPLOYED PERSONS BY WAGE INCOME GROUP AND BY SEX
(April Rounds of Labour Force Survey)

Year	Sex	J$0	<J$10	J$10-20	J$20-30	J$30-40	J$40-50	J$50-100	>J$100
1968	Male	5.60	62.30	20.10	5.60	2.90	1.90	1.30	0.40
	Female	13.40	69.40	10.40	4.00	1.60	0.90	0.30	0.00
1972	Male	5.10	36.60	30.10	14.10	5.60	3.30	4.10	1.10
	Female	7.60	47.00	25.90	8.90	4.40	2.20	3.60	0.40
1973	Male	7.60	34.20	31.30	12.90	6.70	2.30	3.50	1.50
	Female	8.10	43.80	29.50	6.90	6.10	2.40	2.20	1.00
1974	Male	5.10	26.90	24.70	14.90	10.60	6.70	7.80	3.30
	Female	8.50	31.60	31.10	9.80	5.90	3.50	8.50	1.10
1975	Male	3.90	20.20	19.50	15.80	13.60	9.00	13.10	7.90
	Female	6.00	21.60	27.90	16.60	9.30	4.60	11.10	2.90
1976	Male	4.10	18.20	21.00	14.80	12.20	8.70	15.60	5.40
	Female	11.10	16.30	20.90	23.10	11.00	4.60	9.80	3.20
1977	Male	4.00	15.10	20.30	17.30	11.90	8.30	16.30	6.80
	Female	12.10	13.50	16.90	27.00	9.00	5.30	11.30	4.90
1978	Male	5.60	13.00	19.00	14.50	11.30	8.90	19.50	8.20
	Female	12.70	13.50	16.60	23.30	9.80	5.40	13.30	5.40
1979	Male	4.30	9.40	16.80	15.00	11.40	10.20	22.60	10.30
	Female	12.10	9.80	14.80	22.20	11.60	7.80	14.40	7.50
1980	Male	4.80	5.30	8.50	11.40	12.00	11.70	28.80	17.40
	Female	11.60	4.50	9.70	15.10	17.90	9.40	18.70	13.00
1981	Male	4.20	5.90	10.10	10.90	11.20	10.30	27.30	20.10
	Female	9.10	4.60	11.90	12.80	15.00	10.80	20.80	15.00
1982	Male	4.80	5.40	9.80	9.60	9.60	9.80	27.10	23.90
	Female	11.60	3.50	9.00	11.20	15.80	9.10	20.90	18.90
1983	Male	2.40	8.60		6.30	5.90	5.80	19.90	51.20
	Female	5.80	9.60		7.20	10.20	8.70	18.40	40.10
1984	Male	3.00	7.00		5.70	6.20	6.20	23.30	48.60
	Female	6.80	7.70		6.40	10.00	8.80	23.20	37.20
1985	Male	4.00	4.20		4.50	4.90	5.40	25.00	52.10
	Female	7.50	5.30		5.50	5.60	6.80	29.00	40.40
1986	Male	4.20	6.80	8.10	22.60	14.60	8.20	5.30	8.70
	Female	7.50	8.60	9.20	29.10	11.10	5.00	4.90	7.40
1987	Male	2.80	6.10	7.10	20.20	13.60	8.70	5.90	13.10
	Female	4.10	6.90	6.90	22.20	13.00	7.90	5.50	11.90

NOTES: For 1983, 1984 and 1985, the category "<J$10" is "<J$20". Hence, there is no separate "J$10-20" category. For 1986 and 1987, the categories are: J$0, <30, 30-50, 50-100, 100-150, 150-200, 200-250, 250+, respectively. In addition, there is a rather large category called "Not Reported". Hence, the row sums do not add up to 100.

SOURCE: LABOUR FORCE SURVEY, various issues.

Another key problem is that, as the reforms progress, legislative and regulatory problems become less of a constraining factor, and the crucial bottlenecks become administrative capacity and physical infrastructure. Bad policy combined with unfortunate external developments caused the decline, but reversals in these areas cannot enable the economy to leap immediately back to its old growth track. Too much deterioration and migration of human, physical, and financial capital has taken place for that to happen. Government institutions are particularly weak and donors have well-founded doubts about the ability of the government to undertake the restorative programs it already has on its agenda. Aid digestion problems loom in health, education, institution-building, and infrastructure support. These problems and concerns about the sustainability of reforms have meant that foreign investment has fallen short of expectations.

If external events did favor Jamaica and oil prices fell while bauxite prices rose, everyone, including women, would benefit. This might, however, be a mixed blessing, especially as far as women are concerned. The mining sector is small in employment terms and is almost exclusively male. The additional taxes and royalties that the government would earn would enable it to enhance public sector programs, which arguably are of greater benefit to women. But the economy would tend to suffer the Dutch disease, so-called after the rise in earnings from North Sea oil caused an appreciation of the Dutch currency inducing a sharp slump in non-oil exports of this traditionally export-oriented economy. In Jamaica the garment sector would be among those negatively affected.

VII. LESSONS FOR A.I.D.

The contractionary effects of the stabilization phase of structural adjustment appear to have weighed more heavily on women than on men. Women's real wages dropped more than men's during the 1979 slump. They entered the labor force in larger numbers to compensate for losses of family income, and many of them undoubtedly did double time as mothers and workers. The contraction in 1984-85 included sharp cuts to the public sector which provides benefits that are relatively more important to women and which is a relatively greater employer of women. Women were therefore more strongly affected in terms of both service levels and job opportunities. However, it must be recognized that before adjustment began, wages and physical capital in public sector institutions, especially health and education, had decayed substantially from the relatively high standards in the 1960s and the deterioration of health and education services may therefore have been less than proportional to the cuts implemented in 1984 and 1985.

Women's participation rates are much more responsive to economic recession than are men's. This stems from the high rates of female-headed households and the women's general responsibility for rearing children. (Single women cannot afford to quit even when real wages fall and married women enter the labor force to sustain family income if the husband loses employment or real income.) This means that women tend to act as shock absorbers during the recessionary periods.

These facts suggest that targeted measures can be effective to counteract the relatively larger negative impact of structural adjustment on women in the short to medium terms. These measures are of two sorts. The first consists of the direct provision of goods and services that are of relatively greater benefit to women. The food stamps program seems to have been particularly valuable in this regard. Efforts to sustain health and education standards through the initial contractionary phases of adjustment would have been much more difficult. These are areas which require more sustained reconstruction efforts and in which improvements are limited by internal planning and administrative capacities. To be effective in the short term, donors must be prepared to provide the services directly themselves or through international NGO groups, and cannot rely on local staff and resources.

The second set of measures consists of those that will increase women's income-earning potential. Budgetary restraint limited the scope for employment creation schemes during the adjustment period, and in 1984-85 the government specifically tried to reduce public sector employment as a policy goal. Employment schemes have been used in other countries. They have sometimes been directed at improving infrastructure to facilitate economic recovery. Such construction activities are often bigger employers of men than women, but even so in Jamaica they might have served to reduce, indirectly, some of the pressure on women to join the labor force. In fact, the sectoral and occupational distribution of employment by gender makes it hard to selectively enhance women's income-earning capacity. In agriculture, for instance, the majority of landowners are men. They are most likely to benefit from the fertilizer credit and extension programs which are the usual instruments that aid agencies use to reach farmers. Moreover, the larger farmers tend to benefit most and these are much more likely to be men. Women have a higher share of employment among farm laborers than they do among farm operators, but it is very difficult for aid agencies to affect the earnings potential of this group without going through the employers who are men. There may be some basis for selectively targeting women by focusing on particular crops, but the division into male farming activities and female farming activities is not nearly as sharp as it is in, say, sub-Saharan Africa. The only way to be certain of reaching women is to make the programs exclusively for women and even then there can be intra-family offsets.

In trying to create employment, it is important to recognize that the bulk of working women are in the informal sector in activities such as higgling and domestic service. Many of the unemployed are in these sectors as well, but almost half of the jobless have no previous employment. Moreover, it is the latter group that accounts for most of the increase in female unemployment during the contractionary periods. There do not seem to be major shifts in the composition of employment during contraction with the exception of government services where the share of female employment dropped as a result of the large-scale layoffs. Interestingly, the share of women's unemployment accounted for by the public sector fell to an all-time low in 1985 and fell again in 1986 and 1987. This can only be the case if these women either left the labor force altogether or found employment in other sectors. On the basis of the job mobility data, it is probable that those who found other jobs shifted into sales or private sector clerical jobs rather than work as domestics or higglers. In any case, in terms of providing women's job-creation support where it is needed most, the new labor force entrants and the unemployed domestics and higglers rank ahead of laid-off civil servants.

Gender ratios across sectoral and occupational categories have remained very steady over the last 10 years. There has been a slightly more rapid increase in female employment than in male employment and this is due to the relatively greater expansion of the "female-intensive" sectors, particularly garments. While structural adjustment will tend to produce some "winner and loser" sectors, lining up the different anticipated sector growth rates with gender ratios for each sector suggests only a modest relative increase in female job opportunities. There is broad sectoral and occupational participation of women in the Jamaican economy. They are more mobile than women in other developing countries and therefore tend to participate in growth wherever it occurs.

The implication here is that donors have only a weak justification for supporting structural adjustment on the grounds that in the long run it will mean a relative expansion of sectors which employ a high proportion of females. Furthermore, the sectors in which women have relatively greater participation are not on average higher wage sectors so there will not be strong income redistributive effects from expansion in these sectors.

Women have higher rates of unemployment and higher job search rates than men. Among them is a key group of unemployed women with children. This would indicate that women have potentially more to gain from economic growth and increased job opportunities and that such growth could reduce certain pockets of absolute poverty in which women predominate. In this sense, donors do have a reasonably strong argument for supporting structural adjustment on the grounds that it will produce greater growth in the long run and that general growth benefits women relatively more than men. It is important, however, that this support be well conceived.

The United States chose to support Jamaica's adjustment efforts with a large Cash Transfer program. Between 1982 and 1987, US$394 million was made available to Jamaica. This represents 24 percent of all net foreign capital inflows during that period. This money was extended on soft terms until 1984 when it became a full grant program. The program was implemented with the idea that it would provide balance of payments relief; would generate local currency funds used for the food stamps program, for A.I.D. projects and for budgetary support; and would provide incentives for needed policy reforms.

Until 1984 the policy reform incentives took the form of cross-conditionality with the IMF program. The experience in this period was not altogether favorable. In early 1984 after all the FY82 and FY83 cash transfer payments had been made, the IMF declared Jamaica to be out of compliance with the program. Waivers

were obtained and the program continued. Basically, the IMF and A.I.D. had pumped in a large volume of support in the name of policy reform when very little had been done in terms of deficit reduction or exchange reform and these were two of the most important policy reform areas. There is a sense among some officials at the World Bank and the IMF that the funds advanced to Jamaica up to 1984 had the unintended effect of giving the government the latitude to avoid confronting budgetary and exchange regime problems it would otherwise have had to deal with.

One more cash transfer agreement was signed before the Kemp-Kasten Amendment made it impossible for A.I.D. to formally link any part of its program to conditions of the IMF. At the same time, the IMF entered into a series of loan agreements which had tougher conditions attached. There were further slippages with respect to the IMF program, but from 1984 on, the macroeconomic performance has been much better. In parallel with this, the separate conditions attached to the cash transfer agreements signed in 1984 and 1985 became much more detailed and explicit. This led to some tension between the A.I.D. Mission and the government. From 1986 on, the conditionality has been made much more flexible and is done on the basis of "informal understandings between the A.I.D. Mission Director and the Prime Minister" (AID, Special Evaluation Study No.62). This approach seems to have proven effective in terms of achieving A.I.D.'s objectives although it must be noted that there is a high degree of overlap between its objectives and those of the IMF, despite abolition of cross-conditionality, and the IMF's conditions remain formal and explicit.

I. INTRODUCTION

Economic development is, in essence, a process of adjustment. Ideally, as development proceeds, incomes grow, new technologies emerge, and opportunities change, resources are reallocated from one part of the economy to another, labor is re-deployed, and new skills are created to take advantage of the new opportunities. In this view of development, successful adjustment depends in large part on the absence of rigidities in the economy that restrict the ready mobilization of resources in response to changing opportunities. As Streeten (1987) points out, flexibility in the economy becomes both a condition for and an objective of adjustment policy.

Structural adjustment refers to major policy responses to major shocks--internal or external, favorable or unfavorable--with emphasis on the changes needed in the structures of production and distribution to reduce the economy's vulnerability to such shocks (Chapelier and Tabatabai, 1989; Streeten, 1987). In this sense, structural adjustment focuses on the organization of the structures of production and effective demand, with the aim of achieving positive, steady, and sustainable growth of output per capita under balanced supply and demand conditions.

Streeten (1987) notes that the underlying objectives of structural adjustment policies are improving the country's balance of payments position in the medium term and promoting sustainable economic growth in the long term. The policy objectives of structural adjustment programs generally are to: (a) reduce macroeconomic imbalances, (b) shift resources from non-tradables to tradables, (c) build reliance on prices and market mechanisms, (d) liberalize internal and external trade, (e) increase agricultural incentives, (f) minimize the role of the state and, as a corollary, (g) encourage the private sector to take over functions which were previously within the purview of the public sector (Chapelier and Tabatabai, 1989). If economic structures are flexible and the factors of production are mobile, resources will be reallocated in response to economic incentives transmitted through market signals and adjustment will proceed incrementally and relatively smoothly. Where there is a lack of microeconomic flexibility, fiscal and monetary management is frequently successful in achieving its objectives, if at all, only after long delays and through the indirect means of first creating substantial unemployment of labor and other resources (OECD, 1983). During the course of such delays, the economy often weakens even further and becomes even more vulnerable to new shocks as well as increased political and social unrest.

In response to the economic crises of the 1980s, the development community has given considerable attention to adjustment issues in economic development, often to the exclusion of concerns over poverty and equity that prevailed in development thinking in the 1970s. However, as evidence has mounted that the types and timing of stabilization and adjustment measures countries have undertaken have halted and, in some cases, reversed progress in health, nutrition, and education (Commonwealth Secretariat, 1989), attention has turned once again to poverty and equity issues under the guise of the "social dimensions of adjustment" and "adjustment with a human face." Discussions about "adjustment" increasingly have encompassed the full range of issues previously discussed more generally under "development" (Streeten, 1989). As the development process in individual countries proceeds often in different directions and at different rates than anticipated when adjustment policies were formulated and implemented, the crucial linkages and interrelationships between economic and social development have received greater prominence. As a result, assessing the costs and benefits of adjustment policies--in both economic and human terms--has become a critical precondition for future development efforts.

The World Development Report (WDR) (1990) describes the eradication of poverty as the fundamental issue in economic development (p. 7). The importance of this issue is signaled by the fact that the 1990 WDR is devoted primarily to examining the relationships among reducing poverty, developing human resources, and achieving sustainable economic growth. Poverty is one of the greatest obstacles to the development of human resources in any country. Yet, without economic growth, poverty alleviation is an elusive goal at best. And without the development of human resources, sustainable economic development becomes unachievable.

The dynamic interconnectedness of these issues makes it necessary for policy planners to consider a wide range of social, as well as economic, implications of all development policies. Contrary to some development thinking, evidence exists that policies that promote economic growth can be consistent with policies that promote human resource development and poverty reduction. In fact, policies that view the poor primarily as active contributors to the economic process rather than as a welfare drain on the economy have been associated with rapid declines in poverty and sustained economic growth (WDR, p. 52). To ensure that the poor participate in and contribute to growth, however, they must be able to respond to new income-earning opportunities. This certainly requires flexible economic structures and the adoption of policies that (a) increase the efficient use of the assets owned by the poor and (b) expand their access to the factors of production: labor, land, credit, infrastructure, and productive inputs (WDR, p. 56). But the ability of the poor to respond to new opportunities also depends on a substantial investment in the development of human capacity through health, nutrition, sanitation, and education.

Poverty affects both males and females. However, it is generally recognized that the majority of those living in the most severe poverty are women and children, who form the most rapidly growing segment of the world's poor (Grown and Sebstad, 1989; Jenkins et al., 1985; Waring, 1988). Available data on health, nutrition, education, and labor force participation indicate that women are often severely disadvantaged because they face many cultural, social, legal, and economic obstacles that men--even poor men--do not (WDR, 1990, p. 31). The Commonwealth Secretariat (1989) report on engendering adjustment states that women almost always face more severe constraints and harsher choices in their use of time, and, consequently, their decisions about the allocation of their labor, than men do, and this difference has been magnified by economic recession and structural adjustment. The ways in which women are affected by structural adjustment depends upon their specific roles--particularly their economic roles--within the economy and society.

Economic activities are central to structural adjustment efforts. Therefore, it is essential to understand women's economic roles and the constraints imposed upon their economic activities in order to assess the potential direct impact of structural adjustment policies on them. Women also play vital social roles that often compete with and, in some cases, preclude their economic participation, and that place stringent demands upon their time and labor. Often through their social roles, women's activities constitute major contributions to family survival through the production of goods and services for family consumption that otherwise might have to be purchased or foregone. Women's unpaid labor in the household, farm, and family enterprises contributes to family economic survival and welfare but goes unremarked and uncounted because it remains outside the cash economy.

To derive a complete picture of the impact of structural adjustment on women, it is necessary to examine the direct and indirect social and economic implications of policy change on both their economic and social roles. This requires an examination of (a) the expectations, demands, and constraints placed on women in their social and economic roles, respectively, (b) the interrelationship between their social and economic roles within their socio-cultural context, and (c) the effect structural adjustment has on their ability to balance and

carry out these roles, respond to changing economic opportunities, and more fully participate in and contribute to economic development. As change is a dynamic process, it is also important to determine, insofar as it is possible, what ways structural changes in the economy may eventually alter women's economic and social roles, and may, over the longer term, improve their ability to respond to economic incentives.

A. The Case of Pakistan

Pakistan presents an interesting case of economic growth that has raised the incomes of the poor while the severe neglect of social services has lowered their standards of living and diminished their prospects for the future. In the 1980s, Pakistan's overall economic performance was strong--with real GDP growth averaging 6.3 percent per year. Important progress has been made in improving the policy environment to encourage the private sector and increase the role of markets in economic decisions. Notable improvements have been made in decontrolling prices, deregulating industrial activities, opening domestic and foreign trade in several major commodities to the private sector, and implementing a flexible exchange rate management policy. Subsidy programs for pesticides, seeds, nitrogenous fertilizers, and public mechanization services have been gradually dismantled. At the same time, however, infant, child, and maternal mortality has remained unusually high. Primary school enrollment and, consequently, secondary and tertiary school completion, has been among the lowest in the world. Approximately 52 percent of children under five years old are underweight, 32 percent of the urban and 29 percent of the rural population live below the poverty line, around 70 percent of the population is illiterate, and the population growth rate, at 3.1 percent, is one of the highest in the world (World Bank, 1989; World Bank, 1990; United Nations, 1990; United Nations, 1989).

The Human Development Report (1990) places Pakistan in the category of "missed opportunities for human development" (p. 42). Of particular interest vis-à-vis structural adjustment, the failure to improve the skills of the labor force has placed serious limitations on the ability of the poor to respond to changing economic opportunities. Pakistan's abysmal human development record has been attributed to the failure of meso policies. The report states:

> Although growth has been good, Pakistan is still a low-income country. This low income implies that primary incomes--even if equitably distributed, which they are not--are insufficient, on their own, to permit the bulk of the people to acquire the goods and services needed for a decent life...Education and health are provincial responsibilities, but the provinces lack adequate financial resources--and a major decentralisation of financial powers from the federal government to the provincial governments...has been pending...since 1974. There is a serious imbalance between military and social expenditures--an imbalance that grew much worse in the 1980s as military expenditures rose five times while public sector development expenditure only doubled...Pakistan spends a very small part of its budget on the social sectors--and a large and growing part on the military, preempting scarce resources that could otherwise be earmarked for education and health....a large part of the limited social expenditures goes to lower-priority activities...Pakistan's overall experience shows that inadequate social spending and poorly structured meso policies can prevent a low-income country from improving the human condition even if there is rapid economic growth with a relatively moderate distribution of income (pp. 59-60).

Pakistan also presents an extreme case of gender disparities in all sectors and roles in society, reinforced by religious beliefs and ethnic and cultural practices. The overall status of women, although elevated in Islam, is, in reality, extremely low. The report of the Pakistan Commission on the Status of Women (1986) describes Pakistani women's position as follows:

> Notwithstanding the exalted position of women in an ideal Islamic social order, the actual status of women in Pakistan is today at the lowest ebb. Women in general are dehumanized and exercise little control over either themselves or on affairs affecting their well being. They are treated as possessions rather than as self-reliant, self regulating humans. They are bought and sold, beaten and mutilated, even killed with impunity and social approval. They are dispossessed and disinherited in spite of legal safe-guards. The vast majority are made to work for as long as sixteen to eighteen hours a day, without any payment...Their status is based mostly on local customs...The participation of the majority of women in national life is marginal and most of them are still mute spectators of the changes taking place around them (pp. 2-3).

Evidence suggests that women in Pakistan make significant economic contributions to both the economic and social spheres despite the social, cultural, and institutional constraints placed upon their activities and despite the fact that these contributions are not only not generally recognized or recorded but in many cases are also assigned a negative social value. Nevertheless, Pakistani women represent a vast, albeit critically undeveloped, resource for both human and economic development. Structural adjustment policies that do not consider the roles and contributions--current and potential--of Pakistani women and the constraints these women face in responding to new opportunities, may perpetuate the tendency inherent in Pakistan's development to miss key opportunities, and may even undermine the ultimate success of sustainable development efforts.

II. SOCIAL, POLITICAL, AND HISTORICAL BACKGROUND

Structural adjustment does not take place in a vacuum. It is conditioned by political, environmental, and cultural, as well as economic, factors. These, in turn, are shaped and conditioned by the geography and history of a given country. Although consideration of these many factors complicates the process of analyzing the impact of a given program or set of policies, the neglect of one or several of these factors may lead to widely inappropriate or inaccurate conclusions and recommendations.

Women constitute approximately 48 percent of the population in Pakistan (Figure 2.1). In general, although women are primary agents for the transmission of cultural and societal values, they exercise little power or decision-making authority in the political or economic realms that so influence the quality of their lives. Nowhere is this more evident than in Pakistan.

Before an examination can be made of the impact of structural adjustment programs on women in Pakistan, however, it is essential to understand something about the historical, cultural, political, and economic context within which both structural adjustment and women's social and economic status are played out. Although a comprehensive description of these factors is far beyond the scope of this study, the brief discussion that follows provides a thumbnail sketch of Pakistan's development.

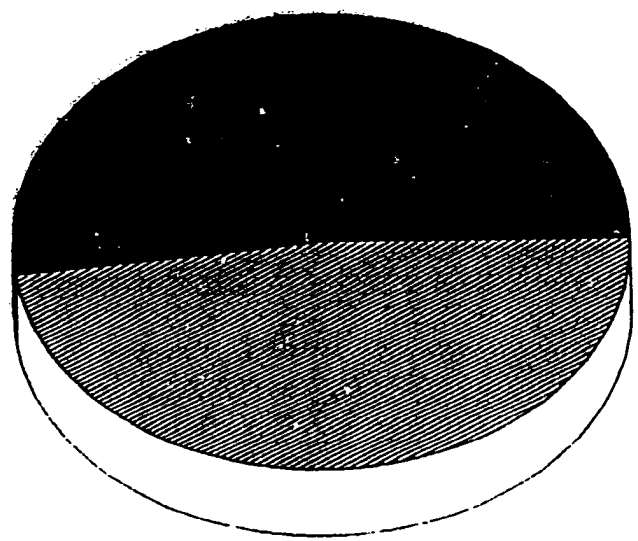
A. Geographic, Ethnic, and Language Divisions

Pakistan is located in the northwest of the Indian subcontinent extending from the Arabian Sea a thousand miles northward across eastern plains to the Hindu Kush and the foothills of the Himalayan mountains. Its climate ranges from hot, dry desert to temperate in the northwest, and arctic in the north. Covering a total area of 803,940 sq. km. (310,426 sq. mi.), the terrain ranges from the flat Indus plain in the east; mountains in the north and northwest; and Baluchistan Plateau in the west (Figure 2.2).

Pakistan's constituent political units are the Northwest Frontier, Punjab, Sind, and Baluchistan provinces. The population of Pakistan, currently estimated at 106 million people, is predominantly rural (69 percent) (Figure 2.3) and is unevenly distributed across the provinces (Figure 2.4). For example, Punjab covers only 28 percent of the land but contains 58 percent of the population while Baluchistan, with 44 percent of the land, contains only 5 percent of the population. The major ethnic divisions in Pakistan are Punjabi (66 percent), Sindhi (13 percent), Pashtun (Pathan) (9 percent), Baluchi, Muhajiir (immigrants from India and their descendants), and other (12 percent). About 97 percent of the population is Muslim (77 percent Sunni, 23 percent Shi'a); 3 percent Christian, Hindu, and other. Although English is lingua franca of the Pakistani elite and most government ministries, official policies are strongly promoting the use of Urdu, spoken by approximately only 7 percent of the population. Other spoken languages include Punjabi (64 percent), Sindhi (12 percent), Pashtu (8 percent), and Baluchi and other (9 percent) (World Atlas, 1989; PCGlobe, 1989).

While much of its area consists of mountains and deserts, some of the most fertile and best-irrigated land in the subcontinent is provided by the river system of the Indus and its four tributaries. Agriculture is the major occupation of a vast majority of the population, which is approximately 69 percent rural. The principal crops are wheat, cotton, barley, sugarcane, millet, rice, and maize, as well as fodder crops. In addition, the western province of Baluchistan supplies a rich crop of fruits and dates. Although not heavily endowed in mineral resources, the country has deposits of rock salt, gypsum, coal, copper, iron ore, and limestone, in

FIGURE 2.1: PAKISTAN POPULATION BY SEX



SOURCE: GOVERNMENT OF PAKISTAN, LABOUR FORCE SURVEY, 1987-88.

FIGURE 2.2: PAKISTAN
MAP OF PAKISTAN

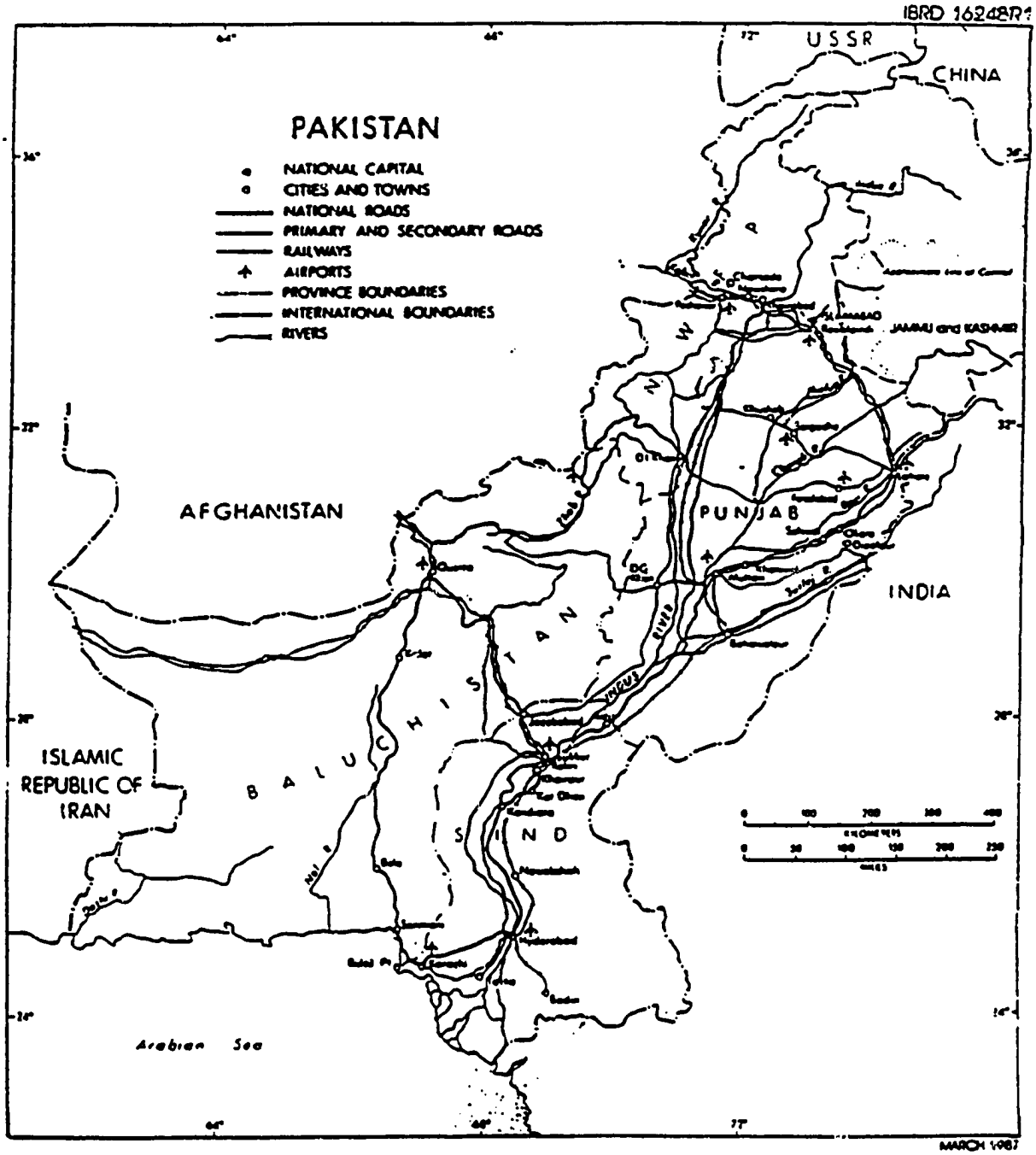
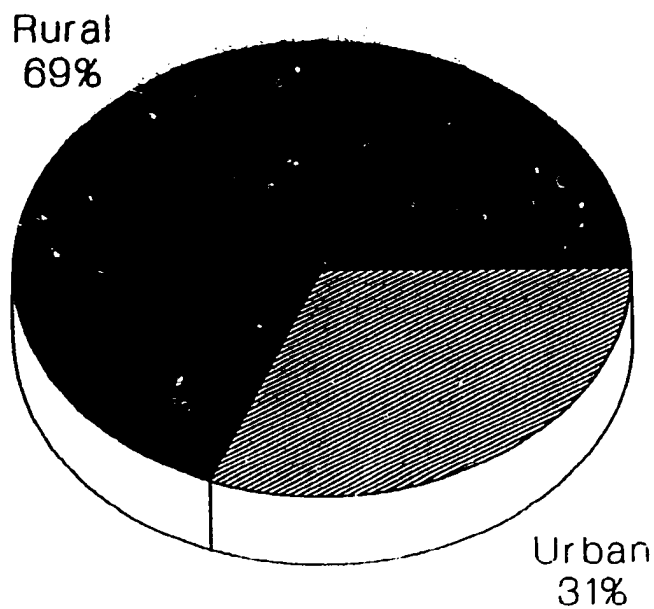
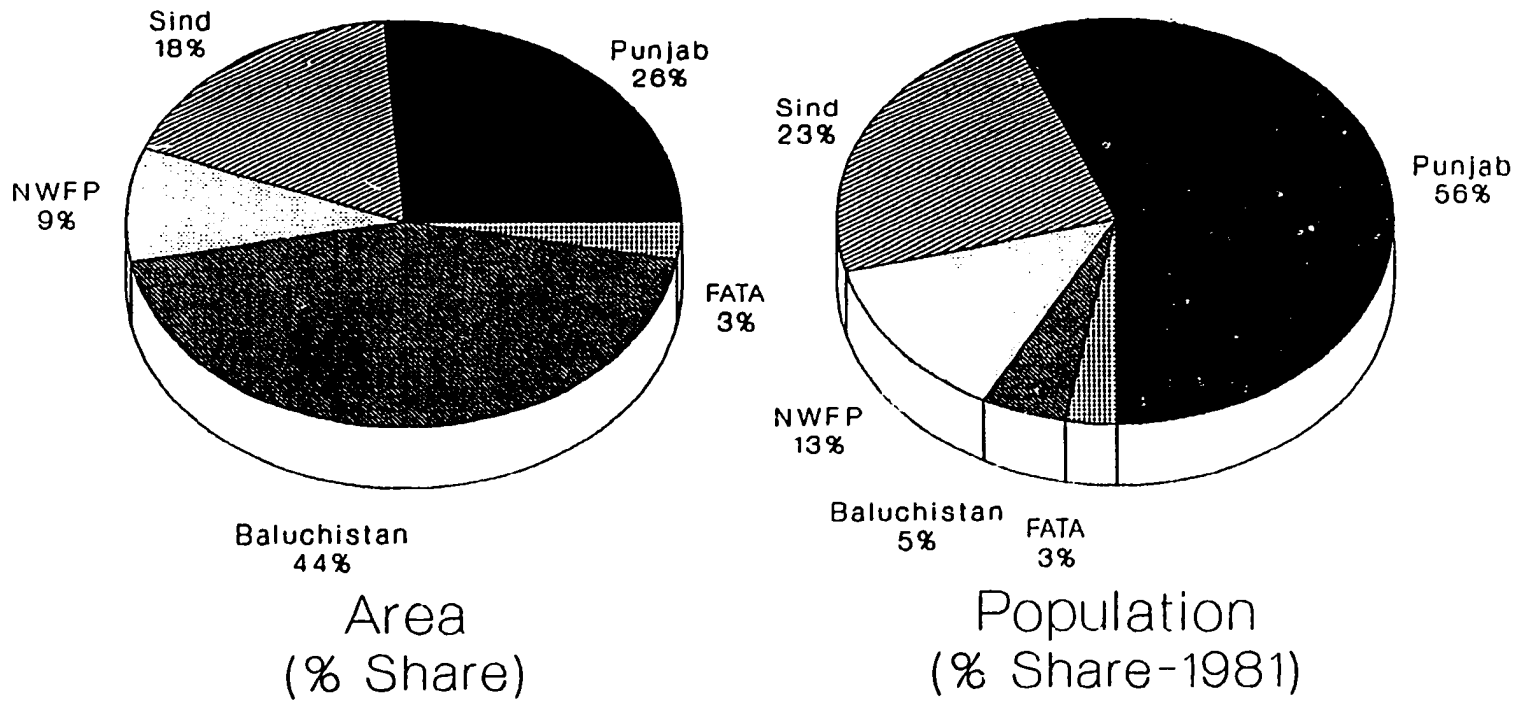


FIGURE 2.3: PAKISTAN RURAL/URBAN POPULATION, 1988



SOURCE: UNITED NATIONS, HUMAN DEVELOPMENT REPORT, 1990.

FIGURE 2.4: PAKISTAN AREA AND POPULATION BY PROVINCE



SOURCE: WOMEN IN PAKISTAN, 1985.

addition to crude oil and natural gas reserves. The major industries are textiles, fertilizers, steel, food processing, oil products, chemicals, and mining. Major imports are oil, edible oils, armaments, machinery, chemicals, fertilizers, and tea. Major exports are rice, raw cotton, cotton products, textiles, and oil products (Political Handbook of the World, 1980; PCGlobe, 1989; UNDP, 1990; World Atlas, 1989).

B. Creation of Pakistan in 1947

Pakistani women live in a culture that is centuries old, created through the conflict and convergence of diverse ethnic groups, religious beliefs, and social, political, and economic customs. The formation of Pakistan in 1947 incorporated parts of Bengal and Assam from east India and Sind, Baluchistan, the Northwest Frontier, and a part of the Punjab from the west. Massive refugee movements resulted: eight million people migrated from India to Pakistan, while six million people left Pakistan for India. These refugees brought with them cultural systems, political ideologies, and economic and administrative practices very different from those of the indigenous populations (Burki, 1986).

Modern-day Pakistan has experienced strong Islamic influences since the seventh century. The areas that make up Pakistan and Bangladesh became part of the British Indian Empire during the eighteenth and nineteenth centuries. Together they contained most of India's Muslim population before partition of the subcontinent in 1947. Pressure to create a separate Muslim state began in the early 1930s and was accepted in 1940 by the All-India Muslim League, the major Muslim political party. When the Muslim League swept the 1946-47 elections, the British accepted partition. Parliament passed the Indian Independence Act incorporating the principle of a separate Pakistan.

C. Political Instability, 1947-1958

Burki (1986) contends that after more than four decades, Pakistan remains politically unstable and lacks viable institutions. He notes that since 1947 the country has tried several different political systems and three formal constitutions, promulgated in 1956, 1962, and 1973, respectively. During its relatively brief existence, Pakistan has engaged in three major wars (1948-49 and 1965 over the disputed state of Kashmir, 1971 with East Pakistan (now Bangladesh), and a series of small skirmishes (with Pathan and Baluchi tribes that live in the "unsettled area" between Pakistan and Afghanistan (p. 5). Pakistan's economic strategies have been equally unstable, diverging widely with changing political priorities.

Since its creation in 1947, Pakistan has experienced several political revolutions and transitions. The newly-formed country's first decade witnessed a succession of governments. Mohammad Ali Jinna, head of the All-India Muslim League and Pakistan's first governor general, died in 1948. In 1954, Liaquat Ali Khan, Pakistan's first prime minister, was assassinated. General Ghulam Mohammad declared a state of emergency, and in 1955, President Iskander Mirza was installed. In 1956 a constitution was belatedly adopted, but it lasted only two years when Mirza was replaced through a coup. Field Marshall Mohammad Ayub Khan, the chief martial law administrator, replaced Mirza as president (Political Handbook of the World, 1980).

The majority of the population of Pakistan is Muslim, making Islam an indisputably dominant societal force. Notwithstanding the role of Islam as the ideological basis to establish a separate state, the history of Pakistan reveals the persistent influence of strong ethnic, class, and linguistic identities (Alavi, 1988) which have worked against the creation of a unified, national Islamic identity. With the creation of Pakistan as a separate

state, a national governmental structure was established over land that was not only physically separated by one thousand miles of hostile Indian territory, but also socially and culturally divided. The immigration of numerous urban-oriented, well-educated muhajiirs into a predominantly rural society further exacerbated these differences.

Noman (1988) describes Pakistan as "an entirely artificial geographical enterprise." He points out that there was no historical basis for engendering loyalty to Pakistan among the various regions. The emphasis on religion as the common bond "faced the inevitable danger of drifting into an argument for a theocracy, a position diametrically opposed to the secular orientation of the regime that set about to create a separate nation state. National integration had to be constructed, therefore, solely on the basis of contemporary structures and policies" (p. 35). These structures and policies were designed, in large part, by political and economic elites and bureaucrats who had derived their primary administrative experience and economic development philosophies from the urban centers of colonial India.

Economically, the creation of Pakistan meant the breakup of a customs union that had lasted nearly three hundred years. The area that made up East and West Pakistan had been considered the granary for an undivided India, and had provided cotton and jute for mills located in the industrial areas of the subcontinent--located in India after partition (Altaf, 1983). At the time of partition, Pakistan had few developed markets for its primary products, had limited manufacturing capacity, and experienced severe shortages of skilled manpower. The poorest part of the British Indian Empire economically, the area that made up Pakistan was also politically, socially, and administratively backward compared to the rest of India. The economy was predominantly rural, and the majority of the population was engaged in agricultural production. The physical, human, and institutional infrastructure needed to support a modern economy simply did not exist. The limited external trade that existed consisted primarily of goods and commodities exchanged with areas of India contiguous to Pakistan. The country's currency and infrastructure (roads, railways, telephone, telegraph, communications and postal systems) were extensions of those in India, and the large irrigation network established in the province of Punjab was split in two at partition (Burki, 1986). At its creation, Pakistan's industrial assets were worth only approximately $112 million (Altaf, 1983).

D. Economic Strategies, 1947-1958

At partition, the sections of the sub-continent containing the established industrial base were retained by India. To compensate for the loss of this industrial base, Pakistan's Industrial Policy Document (1947) emphasized the need for import-substituting industrialization (Noman, 1988). Thus, between 1947 and 1958, investments were concentrated on establishing and expanding a large-scale manufacturing sector (Ahmed and Amjad, 1984). Emphasis was placed on import-substituting industries to produce consumer goods domestically that would otherwise need to be imported (primarily from India at that time). Despite the goal to reduce import dependency, however, all the machinery for the capital-intensive industrialization efforts had to be imported (Burki, 1986; Noman, 1988).

As resources were diverted to industrialization efforts, agriculture, the dominant sector in the economy, stagnated and was unable to keep up with population growth. Per capita consumption of food grain declined and in many cases had to be supplemented through food imports (Ahmed and Amjad, 1984). The neglect of the agricultural sector ultimately seriously hampered the nation's overall growth performance. Moreover, the concentration of investment in industrial development created an urban bias that favored some provinces over others (particularly the Punjab) and benefitted the urban-based elite and educated bureaucrats (primarily muhajiirs) and landed interests disproportionately. Noman (1988) contends that the transfer of resources from

agriculture to industry seriously exacerbated already difficult social and political rifts in the country. In particular, the transfer of scarce foreign exchange revenues earned by jute exports of the eastern wing (present-day Bangladesh) to West Pakistani industrialists, became a symbol of regional and ethnic exploitation that would lead to the ultimate division of the country (Noman, 1988, p.18). The Korean War had created a considerable demand for jute--produced primarily in East Pakistan--elevating its value as an export. However, this important source of foreign exchange earnings was not being returned to East Pakistan, but rather was being used to finance the development of West Pakistan.

Although, in theory, the partition of the sub-continent provided a unique opportunity to establish a government and economic system based on Islamic principles, in reality, the dominance of the landed interests and urban-oriented muhajiirs over the political structure ensured that even mild reforms were not introduced (Noman, 1988). The minimal allocations of resources for social sector spending (barely 4 percent of government expenditure was allocated annually for education, health, and social services) established a pattern of governmental neglect of social sector spending that persists to this day. Furthermore, allocations for social services were squeezed by defense expenditures for military security against India (Noman, 1988, pp.15-16) establishing another pattern of spending that has been consistent throughout Pakistan's history.

E. Martial Law, 1958-1969

In 1958 field marshal Mohammad Ayub Khan took over the presidency from President Iskander Mirza through a military coup d'état. The parliamentary form of government was abolished, the 1956 constitution was abrogated, all political parties were dissolved, political activity was banned, and martial law was proclaimed (Burki, 1986). Noman (1988) describes the Ayub regime as "a peculiar form of representational dictatorship" (p. 27) noted for the unrivaled dominance of the bureaucracy (strongly biased toward muhajiirs) and the vast efficiency with which it executed policy--especially economic policy. Although constitutional government under a presidential system (based on indirect elections) was restored in 1962, "power was concentrated in the hands of Ayub who, nonetheless, relied extensively on the bureaucracy for the effective functioning of the governmental machinery....Indeed, it bore a striking similarity to the structure of colonial rule" (Noman, 1988, p. 28).

In 1965 civil war broke out with India over Kashmir, the only Muslim majority province remaining in India. Burki (1986) reports that the war ended in a state of confusion with both Pakistan and India claiming victory. When the peace agreement was finally signed, the advantage appeared to fall to India, thus disaffecting Ayub from many of the younger generals in the military who felt they had been betrayed (Burki, 1986; Noman, 1988). The Tashkent Declaration ending the conflict proved to be a turning point for Ayub. Increasing discontent erupted across Pakistan, particularly in East Pakistan. Noman notes that there were 4,946 riots a year in East Pakistan between 1958 and 1966. Ayub's announcement early in 1969 that he would not seek re-election failed to subdue the growing discontent. As a result of a series of mass demonstrations against the regime in 1969, Ayub was forced to resign to General Agha Mohammad Yahya Khan, army commander in chief. Yahya Khan assumed authority as chief martial law administrator, suspended the constitution, dismissed the national and provincial assemblies, and took office as president (Political Handbook of the World, 1980).

F. Economic Strategies, 1958-1969

The remarkable economic development Pakistan experienced during the Ayub regime must be viewed with some caution. The decade of the 1960s is noted for the favorable nature of the international economic environment and growth globally, and, certainly, Pakistan benefitted along with other developing countries from

this favorable environment. In the first half of the decade, the rate of growth of Pakistan's economy was among the highest in the developing world (Burki, 1986). In strictly economic terms, the Ayub era produced substantial economic development with rapid GNP growth in both the industrial and agricultural sectors, significant increases in per capita income, and the institution of a framework for development through establishing five-year plans. This was accomplished, however, at the persistent expense of social sector spending, reinforcing the pattern of neglect in human resource development that had been established during the previous decade.

At the beginning of the Ayub regime, from 1958 to the beginning of 1960, the government imposed strict economic and price controls. From 1960 through 1965, the period of the second five-year plan, the policies of strict controls were revised toward de-control over prices, investments, and foreign trade; the position of the private sector as the engine of growth was emphasized; and large increases in foreign loan inflows supplemented inadequate domestic resources to achieve the country's ambitious growth targets (Ahmed and Amjad, 1984). The second five-year plan was a considerable economic success. In fact, under the second five-year plan, all sectors grew faster than targeted. In West Pakistan, particularly, the growth of GNP averaged almost 7 percent per year during the plan period through a balanced mix of private and public sector activity. The plan "encouraged private entrepreneurs to participate in those activities in which a great deal of profit was to be made; the state was brought into those sectors of the economy in which private entrepreneurs were reluctant to go" (Burki, 1986, p. 122).

Although by many measures the Ayub regime is noted as a remarkable economic success, economic development during this period failed to establish a basis for sustainable development and, in fact, set the stage for Ayub's downfall. Despite the clarity of economic objectives and efficiency in execution that characterized the Ayub regime, its choice of policy objectives reinforced and aggravated the deep ethnic and class divisions existing in the country and further exacerbated the conflict between East and West Pakistan. According to Noman (1988), the root of the Ayub regime's failure in the economic sphere was in the government's concentration on promoting economic growth with a deliberate disregard for equity issues (pp. 36-37). In fact, even in its public pronouncements, the government made it clear that it was not concerned with mass welfare. Rather, government economic policy openly promoted inequalities as a necessary precondition for successful economic growth (Noman, 1988, p. 40).

During this period, the United States launched a program of bilateral aid to help Pakistan meet its food import needs and to build physical infrastructure. In addition, Pakistan became a recipient of highly concessional aid flows from the newly established International Development Association (IDA). Although this large inflow of assistance bolstered the regime's economic strategies, Burki points out that it also had an adverse effect by dampening the rate of domestic savings. The third five-year plan (1965-1970) was designed as a continuation of the economic policies that had been deemed so successful during the first half of the decade. However, growing domestic conflict and the 1965 war with India over Kashmir began to dampen economic performance. Between 1965 and 1969, foreign loan inflows began to decrease, food grain shortages occurred, and economic controls were reimposed.

The second half of the decade brought vast improvements in agricultural performance with the introduction of "green revolution" technology. High yielding varieties (HYV) of seed produced remarkable growth in the agricultural sector. The adoption of HYV crop production, however, led to the increased mechanization of agriculture. This favored "a new 'Kulak' class of enterprising capitalist farmers, responding to market incentives and technological developments" (Noman, 1988, p. 39). Many smallholder farmers, who

could not compete with the technologically advanced producers, lost their land, creating an increasing population of landless labor in the rural sector. In general, the direct benefits from the use of HYV production accrued unevenly across the four provinces and favored the Punjab.

The basic development strategy adopted by the Ayub government concentrated investment on those sectors that would yield immediate gains in output at the expense of sectors that would only yield results over the medium and long term, particularly social sectors such as education, health, and housing (Ahmed and Amjad, 1984). Resources were diverted to industrial development and "green revolution" agricultural development in West Pakistan, creating a serious allocative bias against East Pakistan. The government's public advocacy of development without regard to equity was underscored by disclosures of the concentration of wealth within a tiny economic elite: it was widely reported that 22 families owned 66 percent of industry, 97 percent of insurance, and 80 percent of banking (Noman, 1988, p. 41). Consistent neglect of social sector spending and rapid increases in population resulted in substantial reductions in already marginal standards of living for a large proportion of the population despite consistent increases in per capita national income. The wages of industrial workers fell by nearly 12 percent in West Pakistan, between 1954 and 1967. In certain key industries, such as cotton textiles, real wages fell by as much as 23 percent (Noman, 1988, pp. 41-42).

The wide disparities experienced and reinforced in the Ayub regime resulted in violent confrontations in the late 1960s. The fourth five-year plan acknowledged the need for change: "The development strategy has to change fundamentally...income distribution has become fairly skewed in the process of economic development. Real wages declined about a third during the 1960s...The landless labor increased and there was little gain in the real farm income per head for the small farmer. The inequalities between various income groups not only increased but also became more vivid by the growing awareness of the masses..." (quoted in Noman, 1988, pp. 42-43). Glowing economic indicators notwithstanding, in 1969, Pakistan experienced massive social unrest that took the form of riots and strikes. Ayub--who had lost crucial prestige and support as a result of the 1965 war--was forced to resign in the face of the rising domestic turmoil that had been created, in part, by the inequitable structure of his economic development strategy.

G. Political Transition and the First Democratically Elected Government, 1969-1977

President Ayub transferred power to General Agha Mohammad Yahya Khan who announced a Legal Framework Order under which the first free, direct, and democratic elections were to take place. In early 1970, normal political activity was allowed to resume. Pressure increased from East Pakistan to correct its underrepresentation in central government and inadequate share of central resources. East Pakistan, previously granted parity with West Pakistan, was allotted majority representation in the new Assembly to reflect its greater population base. In the elections held in late 1970, the East Pakistani Awami League won 160 seats; the Pakistani People's Party (PPP), 82; and other parties, 58.

The military government refused to transfer power to the Awami league, repeatedly postponed the opening of the Assembly, and eventually banned the Awami League and disqualified 79 Awami League representatives. New elections to fill the vacant seats, scheduled for late December 1971, were canceled by the outbreak of civil war with East Pakistan. With the assistance of India, the Bengalis in East Pakistan seceded from Pakistan and formed Bangladesh. Yahya Khan transferred power to Zulfikar Ali Bhutto, who replaced him

as president and chief law administrator (Noman, 1988; Political Handbook of the World, 1980). In August 1973, the speaker of the Assembly, Fazal Elahi Chaudhry, was elected as president of Pakistan and Bhutto was designated prime minister.

The political disruptions of the late 1960s, together with the devastating civil war and breakup of the country, left the PPP not only with the task of reviving the nation's economy but also of addressing the distributional inequalities that had become entrenched in it. Support for a program of social and economic reform came from a wide constituency (Noman, 1988). In the initial phase, during the first two years of the Bhutto government, the major emphasis was on the introduction of a revival of economic activity and a restructuring of the economy through structural reforms after its virtual collapse. After the initial restructuring of the economy, the main objectives of the Bhutto government were (a) to transform the industrial sector from its consumer goods bias toward setting up basic industries--mainly through expansion of the public sector; (b) to increase investments in infrastructure--particularly in water, power, gas, and communications; (c) to make improvements in the agricultural sector, especially in relation to the industrial sector, and within agriculture, to improve the condition of smaller farmers; (d) to redistribute consumption in favor of the poor through high expenditures on social investment; and (e) to increase employment--especially in the rural areas (Ahmed and Amjad, 1984).

H. Economic Strategies, 1971-1977

Burki (1986) describes the Bhutto era generally as a period of remarkable dynamism during which "the economy was restructured, the public sector was given a great deal of prominence, Pakistan's approach to the outside world was redefined on the basis of a relationship with India that no longer sought equality with it, and a new consensus was developed on constitutional issues among different political players" (p. 69).

Although the extensive public sector involvement in Pakistan's economy is generally attributed to Bhutto's era, the intention to expand public sector involvement predates the ascension of the Bhutto government to power. "In the last days of the Ayub Government...substantial progress had been made in negotiations with foreign powers regarding collaboration in setting up large capital goods producing units, such as a steel mill. The intention was to expand the public sector into capital goods production, with the private sector being encouraged to establish down-stream industries (Noman, 1988, p. 74). Under Bhutto, however, the expansion of the public sector to restructure the economy was viewed more widely to meet social (redistributional) as well as economic objectives. Under Ayub a substantial class of large industrialists had been created that was resented by both conservative and radical groups. The nationalization of large industries, banks, and insurance companies under Bhutto in 1972 mainly affected the "top twenty-two families." Nationalization was viewed primarily as an attempt to curb the growth of large monopoly capital. Assurances were given to private capital that no further nationalizations of industrial units would take place (Noman, 1988).

Later nationalizations (1973-1976) did occur, however, and extended to small- and medium-sized capitalists until by 1976, access to the state became the primary route to accumulating wealth (Noman, 1988, p. 75). Noman contends that private sector confidence was seriously undermined in 1976 when "the government, arbitrarily and unexpectedly, nationalised the flour milling, cotton ginning and rice husking mills. These units processed and distributed agricultural produce to the market. Through public seizure, the government eliminated these intermediaries and directly undertook the marketing of agricultural output." This move adversely affected small entrepreneurs and favored groups placed in management positions by the government.

Private investment fell to less than one fourth of the figure projected for the period (Noman, 1989, pp. 76-77) and the public sector enterprises failed to generate internal investment resources. In the meantime, the government also increased its presence in the social services sector, particularly health and education. Increases in public investment and social services had to be financed through foreign aid and deficit financing.

Despite pledges to alleviate poverty, defense and public administration received priority under Bhutto, effectively diverting resources from social services. The government was unable to raise additional resources to meet its campaign pledge of "food, clothing, and shelter." The implementation of economic reforms fell far short of expectations. In agriculture, uncertainty over institutional reforms and bad weather led to a decline in per capita output. Public sector investment in capital-intensive projects, the insufficient resource-raising capacity of nationalized industries, and continued priority given to defense diverted necessary resources away from the ambitious social sector programs. Despite the inadequate implementation of economic reforms, however, mass support for Bhutto continued. Noman notes that "[t]he very introduction of economic reforms, based ostensibly on concerns for distributional justice, represented an improvement from military regimes who had openly advocated greater inequality" (p. 97).

Exogenous forces also seriously affected Pakistan's development efforts. In the early 1970s the oil shock led to higher energy prices. This was offset, somewhat, by increases in remittances from the export of labor to Middle Eastern countries. In turn, however, "higher oil prices and increases in remittances from workers abroad led to inflationary pressures, and with the private sector not investing, more funds were diverted toward consumption which further increased the demand pressures on the economy" (Ahmed and Amjad, 1984). Pakistan also suffered with numerous other developing countries from the effects of world recession. In agriculture, droughts and floods in two out of the five years of Bhutto's rule adversely affected production.

Despite the uncertainties presented by the forces described above, the aggregate growth of the economy under the PPP as measured by increases in GNP was 4.6 percent per year. This growth, however, primarily took place in the services sector--in defense and public administration--which grew at 11 percent per year. The commodity-producing sectors stagnated. Agriculture grew at a rate less than the growth of population. Large-scale manufacturing declined significantly from 10 percent in the 1960s to 1.91 percent. In the meantime, the government's reliance on foreign capital grew over the period to almost 65 percent of development expenditure in some years. The accumulation of debt meant increases in Pakistan's debt service ratio which, by 1976, had risen to 20 percent. As these resources did not go into significant improvements in domestic productive capacity, Pakistan's ability to service its debt did not keep pace with debt accumulation. Between 1974 and 1980, nearly 60 percent of aid disbursement was returned to donors in the form of debt servicing (Noman, 1988).

Notwithstanding Pakistan's slower economic pace in the 1970s, some advances were made in redistribution. Bhutto's nationalization policies did undermine the advantage of the large industrialists. Changes in industrial relations occurring in the urban sectors led to labor laws in 1972 that covered approximately half of the workers in the manufacturing sector. These laws improved pension rights, provided educational allowances for the children of workers, and provided increased medical and welfare funds for workers. Although real incomes of shopkeepers fell, public sector enterprise workers received four pay increases over the period. The real wages of organized factory workers rose, in some cases by about 6 percent per year. Land reform instituted in 1972 was designed to reduce the size of land holdings to benefit smallholders. These reforms were accompanied by policy changes that shifted the bias away from the urban sectors. The 1972 devaluation removed the subsidies and protection received by industrial sectors. Incentives to increase agricultural production were provided through higher procurement prices for major crops and subsidies for agricultural inputs (fertilizer and

seed). As a result, in 1973-74, the terms of trade for agriculture were more favorable than in any previous year in Pakistan's history (Noman, 1988).

During the early 1970s, Pakistan also developed a growing labor export link with the Middle East. Starting in 1974, hundreds of thousands of Pakistani workers began to migrate to the oil-exporting countries of the Middle East, offsetting, to some extent, the increase in oil prices occurring at that time. Ironically, the greater measure of benefits of labor export to the Middle East did not accrue until after Bhutto's fall.

Despite the gap between promises made and delivered, Bhutto continued to receive popular support and is reported to have been the most popular politician in Pakistan up until his death in 1979 (Noman, 1988). He had succeeded, however, in disaffecting important, powerful segments of the population through the economic and social reforms instituted under his regime. In a general election held in March 1977, the PPP obtained an overwhelming victory. The opposition party, the Pakistan National Alliance (PNA) claimed the elections were rigged. The accusations of fraud mobilized a revolt based primarily in the urban areas sustained "by a wide coalition of groups who had suffered politically, or economically, under the PPP" (Noman, 1988, p. 110). Fierce street fighting, strikes, and riots renewed fears of another civil war. On July 5, 1977, Z. A. Bhutto was taken into custody by General Mohammad Zia-ul-Haq with the justification that the army was averting civil war. Zia claimed that he would lead an interim government only until elections could be held, within 90 days.

I. Martial Law, 1977-1988

The elections promised by General Zia were postponed purportedly because of continuing political turmoil in the country. When President Chaudhry's constitutional term as president expired, Zia assumed the presidency and announced that he would yield to a regularly elected successor in elections to be held in 1979. In April 1979, despite worldwide appeals for clemency, Z. A. Bhutto was hanged. His death spurred mass riots. Zia promised that non-partisan elections would be held before November 1979, but in October they were postponed again, all forms of party activity were banned, and censorship was imposed on the communications media. Between 1979 and 1983 the army tightened its grip under the guise of being the ideological vanguard for a theocratic state. Opposition was silenced by martial law.

As Zia's intentions to retain power became clear, the legitimacy of the military dictatorship, which had never been duly established, became even more tenuous. Bhutto's death had engendered both domestic and international revulsion as had the open terrorist policy against the Pakistani people through the introduction of "savage punitive measures such as public flogging and amputation" (Noman, 1988, p. 120). The relationship between Pakistan and the United States had deteriorated dramatically over Pakistan's nuclear policy (under Bhutto) and the burning down of the American embassy with alleged government approval (Noman, 1988). The Aid to Pakistan Consortium refused to reschedule debt servicing and private sector investment remained sluggish. Then in December 1979 the Soviet Union invaded Afghanistan and catapulted Pakistan to a position of geopolitical prominence as a front-line state against Soviet aggression. Relations with the United States took a remarkable turn as the Zia government negotiated a $3.2 billion package of American military and economic loans, making Pakistan the third largest recipient of U.S. aid (after Israel and Egypt) at that time. Through U.S. influence, the Aid to Pakistan Consortium agreed to reschedule the country's debt. Increased flows of foreign capital assisted in revitalizing the macro-economy.

In 1984 Zia announced that a referendum and general elections would be held on a party-less basis. According to the referendum held on December 19, Zia received a clear mandate to continue in office for five additional years. Zia appointed Muhammed Khan Junejo as prime minister. In December 1985 Zia officially ended martial law and returned Pakistan to civilian rule under his leadership. However, he retained his position as chief of the army, introducing a new pattern of civilian-military rule. By 1987-88 violence erupted again. "Law and order had virtually broken down in parts of the province of Sind. There were almost daily bomb explosions in the province of Frontier. Junejo's government's latest annual budget had angered the merchants and the middle class urban population alike" (Hyman et al., 1988). In May 1988 Zia dissolved the government and called for new elections to be held in November 1988.

On August 17, 1988, President Zia-ul-Haq was killed in an aircraft explosion. The Senate Chairman Ghulam Ishaq Khan took over as the country's acting President. Elections were held as scheduled in November 1988 and the PPP was victorious. Its leader, Benazir Bhutto, was appointed prime minister in December 1988.

III. SOCIO-ECONOMIC PROFILE OF WOMEN IN PAKISTAN

Although the present-day status of Pakistani women is not determined solely by historical circumstances, as Mills points out, the individual and society exist at the intersection of history and social structure (Mills, 1959). The force of Islamic beliefs, ethnic customs and tradition, and the influence of class and linguistic divisions are essential elements of the analysis of women's societal position. The overall status of women in a society is influenced, in part, by the relative value attached to the various social and economic roles they perform and, in part, by their power to control or use important social and economic resources (e.g., education, employment, credit, health services, labor). As many forces influence status, a single indicator of status that embraces both economic and social roles is not possible. In the case of Pakistani women, the parental and conjugal roles have high social value attached to them, but, as in most countries, have virtually no economic value except inasmuch as they lead to the production of male laborers or income earners. Occupational and community roles are considered secondary and have a lower, often even negative, social value attached to them despite the positive economic value they may imply. The individual role is quite different from that in Western societies since individualism does not constitute a significant ideology in Pakistani society. Family (kin) predominates in most major decisions regarding a woman's or for that matter a man's life (Shah et al., 1986).

The typical Pakistani woman grows up in a fairly sheltered environment where most decisions affecting her life are made by others. She has limited opportunities for education or formal employment and little or no alternative to marriage and motherhood. She is most likely illiterate. She learns the moral and social codes of behavior of her kin group and she usually abides by them (Shah et al., 1986). A Pakistani woman's identity is linked to her membership in her kin group--as a daughter, sister, wife, mother, and daughter-in-law or through her other relationships. Although she may achieve status based on career alone (a rare event for any but the socially privileged classes), her place within the family system exerts a strong influence over her place in society. With very few exceptions, all of her role models adhere to tradition, and acceptable alternative life choices simply do not exist.

Approximately half of Pakistan's population live in families of a non-nuclear nature. In non-nuclear households, almost all of which are patrilocal, the kin group usually includes the young bride and groom, his father and mother, his unmarried or married siblings (usually brothers only), and the wives of married siblings. Sometimes grandparents, an aunt, uncle or other relative may also be present. The husband's mother usually commands a great deal of authority and respect. Both the son and the daughter-in-law are expected to defer to her. Upon marriage, a Pakistani woman generally leaves her kin group to join that of her husband. Her status there often remains tenuous until she bears sons for the family. Most events in a Pakistani woman's life--her schooling, her marriage, the number of children she has, whether she works--are strongly influenced by the attitudes of her immediate relatives (Shah, 1986). She can expect to have all major life decision made for her. If she disputes the decisions made on her behalf, she may bring shame to her family and may suffer physical, emotional, and psychological abuse for her deviance (Pakistan Commission on the Status of Women, 1986; Mohiuddin, 1989).

On most counts, the welfare of women in Pakistan is among the lowest in the world. On virtually every socio-economic indicator, women in Pakistan are worse off than their South Asian counterparts (World Bank, 1989). Of course, Pakistani women, as women in other developing and industrialized countries, differ significantly across many factors including class, ethnic background, income level, and degree of education. Nevertheless, the large majority of women in Pakistan (except for a small proportion of relatively affluent and

socially liberated women) are subject to and comply with cultural traditions that encourage the practice of "purdah" (female seclusion). Even among low-income women, where economic circumstances require them to work outside the home and where their income contributes substantially to family economic survival, cultural norms are so strong that husbands will be reluctant to admit that their women work, and women will downplay or deny their own contributions to household income. It is common practice, as income increases, for women who have worked outside the home because of economic need to withdraw into seclusion as a sign of increased status (Mohiuddin, 1989; Pakistan Commission on the Status of Women, 1986; World Bank, 1989).

Purdah observance serves as a symbol of the family's respectability, religiosity, and high status and consequently carries a high social value. Norms of a purdah society demand a clear segregation of the sexes--for example, separate workplaces or schools for males and females. According to the 1968-69 National Impact Survey (NIS), 82 percent of urban women and 47 percent of rural women reported that they observed purdah. A survey of squatter areas in Lahore city conducted in 1982 showed that 87 percent of the women observed purdah by wearing either a burqah or a chaddar (Shah, 1986). Although by no means comprehensive, these findings suggest that a large majority of the urban Pakistani women probably still observe purdah. The 1968-69 study found a strong positive association between purdah observance and the family's socioeconomic status. Both the husband's educational level and family ownership of durable items (wealth) were significantly and positively associated with the proportion of women who observed purdah (Shah, 1986). The wife's own level of education was, however, negatively associated with purdah observance in urban areas--70 percent of the women with higher than primary education observed purdah in urban areas (Shah and Bulatao, 1981).

A. Indications of Women's Welfare

The dominant role of family (kin) in life decisions and the prevalence of purdah observance do not explain the low socioeconomic status of Pakistani women. In the Pakistani context, however, these factors create significant barriers to women's economic participation that are reinforced by social policies and patterns of social sector spending. The net result is wide disparities between the welfare of males and females in Pakistani society by every measure of well-being. These disparities not only disadvantage women severely, they also hinder the achievement of critical development objectives by perpetuating high population growth trends and inhibiting the development of the strong human resource base--both directly and indirectly--required for sustainable development.

Three major indicators of well-being are examined in this report: health, education, and economic participation. These indicators are chosen on the assumption that the capacity to respond to economic opportunities opened up by changes in the economy depends on the existence of a skilled and flexible human capital base. This, in turn, requires a healthy, literate, and mobile work force that is able to take advantage of the changes that occur.

B. Health

Health is an essential element of well-being on the level of the individual, and it is a prerequisite to building strong human capital. Women in Pakistan suffer from very poor health caused, in part, by their excessive reproductive burden. Biological reproduction is a serious drain on women's energy and health (UNDP, 1989), particularly where early, frequent, and late pregnancies are common, as they are in Pakistan. During their peak childbearing years, Pakistani women bear the physical burden of almost constant pregnancy and lactation (World Bank, 1989). Their total fertility rate is estimated to be about 6.8. This means that on average each

woman has six to seven children during her lifetime--a rate that is among the highest in the world, the same as in Bangladesh, but higher than in India, Sri Lanka, Burma, Togo, Uganda, and most other developing countries (National Institute of Population Studies (NIPS), 1989; World Bank, 1989).

Marriage is virtually universal in Pakistan. Although the mean age at marriage for women has been increasing (Figure 2.5), many Pakistani women enter marriage quite young (15-19) and start bearing children soon after (Pakistan Commission on the Status of Women, 1986; World Bank, 1989). Over 40 percent of all births in Pakistan are high risk: the birth intervals are too short, the total number of births per woman are too high, the mother is too young or too old (NIPS, 1989). High-risk births cause both high infant and high maternal mortality. Approximately 600 women per 100,000 live births in Pakistan die prematurely from pregnancy and birth-related causes including hemorrhage, infection, toxemia, obstructed labor, and primitive abortion methods. Only a portion of these deaths can be attributed to high-risk births, however. In part, the high maternal mortality rate reflects the fact that 95 percent of all deliveries are performed at home under unsanitary conditions assisted only by untrained traditional birth attendants and female relatives (World Bank, 1989).

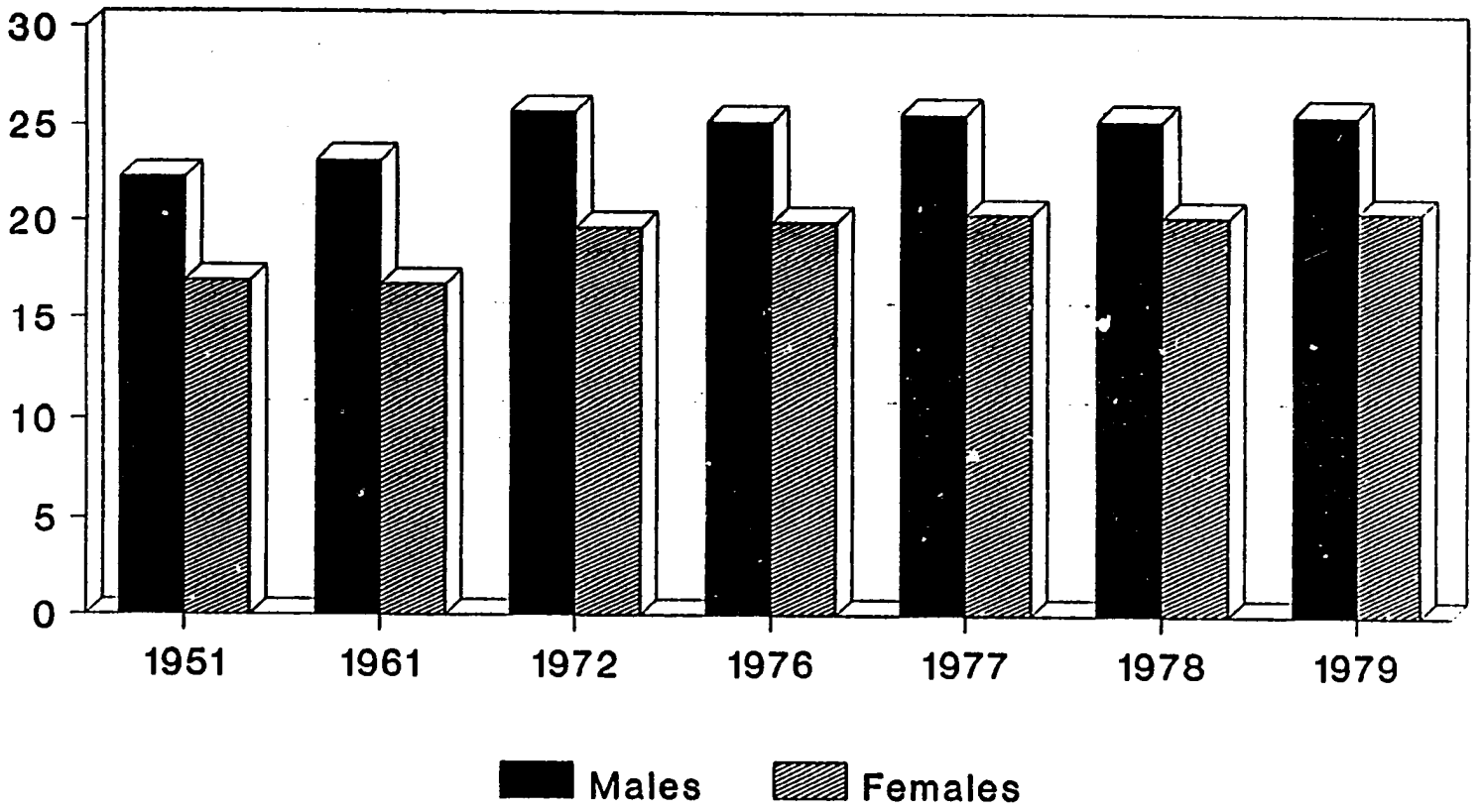
The infant mortality rate in Pakistan has declined over the last few decades from 162 deaths per 1,000 live births in 1960 to 108 in 1988 (Figure 2.6)--a rate which remains higher than in India and considerably higher than in Indonesia, Sri Lanka, and China (Government of Pakistan, 1986; NIPS, 1989; United Nations, 1990; World Bank, 1989).

Even if they escape premature death, the majority of Pakistani women are commonly in chronic ill health as a result of malnutrition, lack of health care, and almost constant childbearing. The 1982-83 National Health Survey found that morbidity rates for women were consistently higher than for men between the ages of 15 and 55. The true picture is probably worse, since female illness in rural areas is commonly underreported. The combined reproductive and physical work burden women bear makes them prone to infectious and respiratory diseases (e.g., from prolonged exposure to smoke from cookstoves in confined spaces), and also contributes to the very high incidence of malnutrition. The Pakistan Nutrition Survey (1984/85) found that about 45 percent of pregnant and lactating women are anemic. Vitamin A deficiency is also prevalent, as is iodine deficiency in the northern mountainous regions (Shah et al., 1986; World Bank, 1989).

Women are more in need of health care and nutrition because of their physical burdens (in addition to childbearing, poor women generally work longer hours than men), but in general they get less food and health care. By custom, women eat last and least of whatever is available to the family. Often they are unable to leave their work responsibilities to go for health care, and when they do, they must usually commit themselves to the care of male doctors, in violation of cultural norms. These barriers cause many women to avoid seeking health care or to delay until illnesses have reached an advanced stage, by which time it may be too late (Shah et al., 1986; World Bank, 1989).

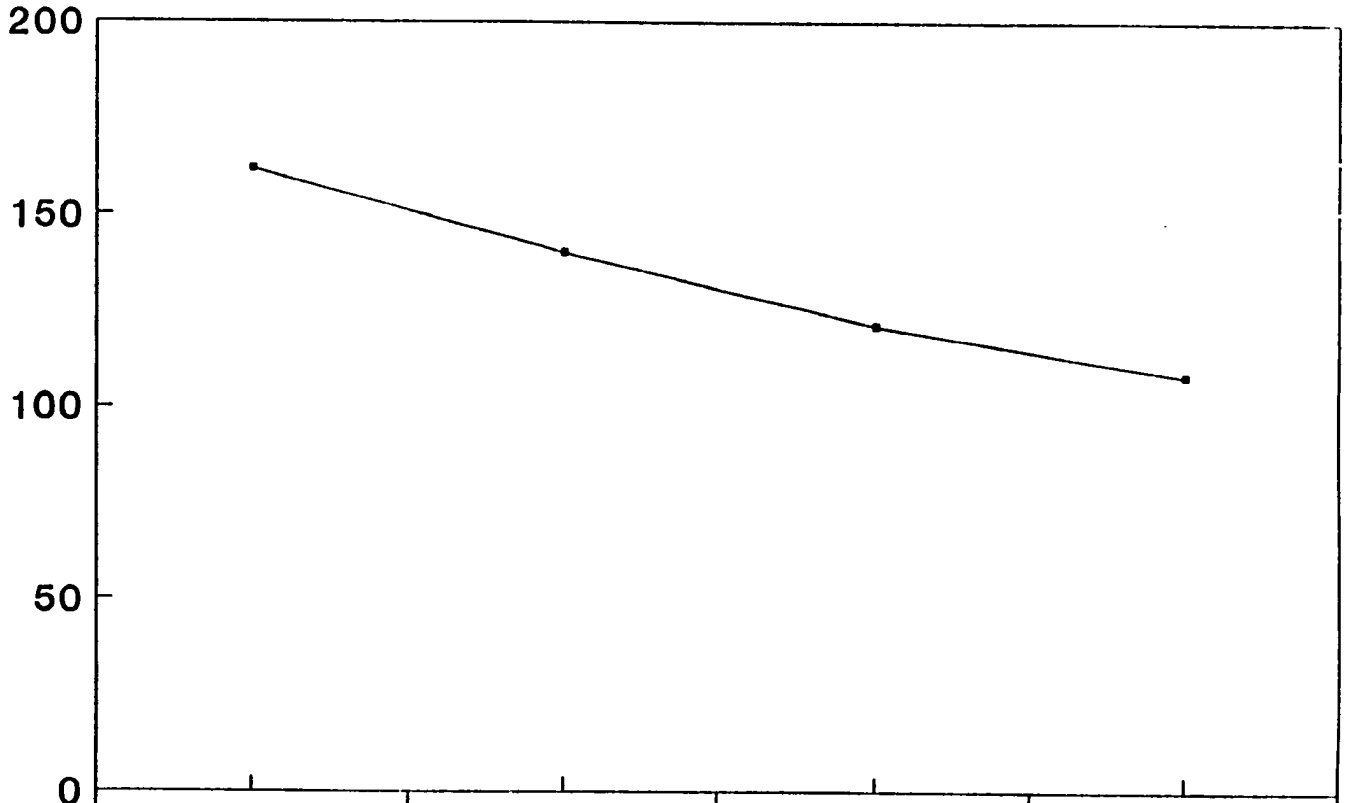
The ill health of children is in large part due to the poor health and low status of their mothers. Sick, weak, and uneducated mothers tend to give birth to underweight and unhealthy children who are more likely to die in childhood or remain prone to illness throughout their lives. Furthermore, neonatal tetanus, which could be prevented by immunizing mothers before or during pregnancy, accounts for about 15 percent of child deaths in Pakistan, and iodine deficiency in pregnant women causes about 7 percent of full-term births to be stillborn or to die within the first month of life (World Bank, 1989).

FIGURE 2.5: PAKISTAN
MEAN AGE AT MARRIAGE BY SEX, 1951-79



SOURCE: GOVERNMENT OF PAKISTAN, STATISTICAL PROFILE OF WOMEN IN PAKISTAN, 1986.

FIGURE 2.6: PAKISTAN
INFANT MORTALITY RATE (IMR), 1960, 1965, 1982, 1988
(Per 1,000 Births)



	1960	1965	1982	1988
IMR	162	140	121	108

SOURCES: GOVERNMENT OF PAKISTAN, STATISTICAL PROFILE OF WOMEN IN PAKISTAN; WDR, 1984; U.N. HUMAN DEV. REPORT, 1990.

The causes of women's poor health are many and complex. High fertility rates and closely spaced pregnancies are the most important causes of high mortality and morbidity among women. These are compounded by inadequate nutrition (especially during pregnancy and breastfeeding), lack of clean water and sanitation facilities, women's economic and domestic work load, and the health care system's inability to meet women's health needs. Poverty and "purdah" prevent many women from getting access to the few health facilities that cater to them. Cultural norms prevent consultation with male doctors and health staff when female staff are not available, which further compounds problems. Government health facilities have inadequate supplies of medicines and other essentials, and few except a small number of Family Welfare Centers offer family planning services. The majority of health care is provided by private practitioners--modern as well as traditional (World Bank, 1989).

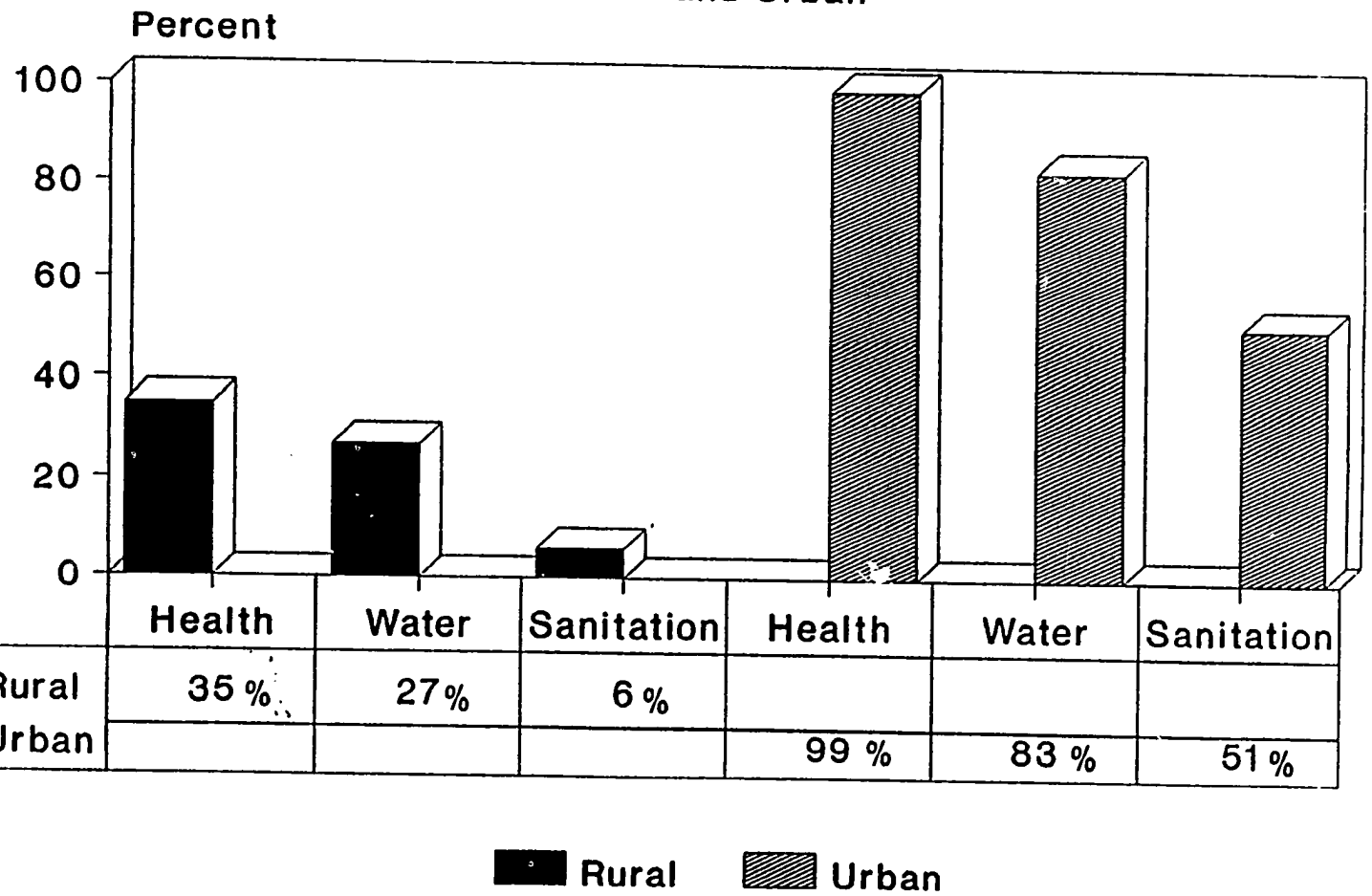
There is a considerable urban bias in access to health services in Pakistan. It is estimated that approximately 99 percent of the urban population has access (based on proximity) to health services, whereas only about 36 percent of the rural population has such access (Figure 2.7). Access to related services such as potable water and sanitation is similarly skewed in favor of urban populations. As nearly 70 percent of Pakistan's population is rural, this unequal access implies a serious health deficit for the majority of the population. Further, as urbanization increases, the growing demand for services in the urban areas will place a severe strain on government budgets.

Approximately 75 percent of primary health care is provided at the family level where women are the main health care providers. Mothers thus provide preventive care to the most vulnerable health risk group--children under five years old. Educating women to detect and prevent infant and child diseases, and practice better hygiene, sanitation, and nutrition in the household, is potentially a very cost-effective method of reducing health problems.

At current population growth rates, it is estimated that a 175 percent increase in facilities and personnel will be required by the year 2018 simply to maintain current, grossly inadequate, levels of health care services (NIPS, 1989). As already low government expenditures for health have actually decreased since 1960 (in contrast to expenditures on defense that have steadily increased) (Figure 2.8), a major proportion of the increased need for health care will undoubtedly fall to women within the household.

Infectious and parasitic diseases continue to be the main causes of mortality and morbidity in Pakistan, and account for more than 60 percent of total deaths. Infants and children suffer the most since 60 percent of total deaths from these diseases are among children under five, of which more than half are infant deaths. The most common diseases are gastro-intestinal/diarrheal infections, followed by measles, neonatal tetanus, acute respiratory illnesses, whooping cough, and tuberculosis. Malaria has also recurred, after having been controlled in the 1960s. Infectious diseases are preventable through immunization and better hygiene and sanitation. Moreover, that most infant deaths occur in the first four weeks of life reflects the poor health of mothers. The impressive achievements in immunization against children's diseases is expected to avert a substantial proportion of child deaths. It is essential to increase the coverage of tetanus toxoid injections for women because infection due to neonatal tetanus is an important cause of maternal mortality and birth-related infections among women; and it accounts for about 15 percent of child deaths (Pakistan Commission on the Status of Women, 1986; Shah et al., 1986; World Bank, 1989).

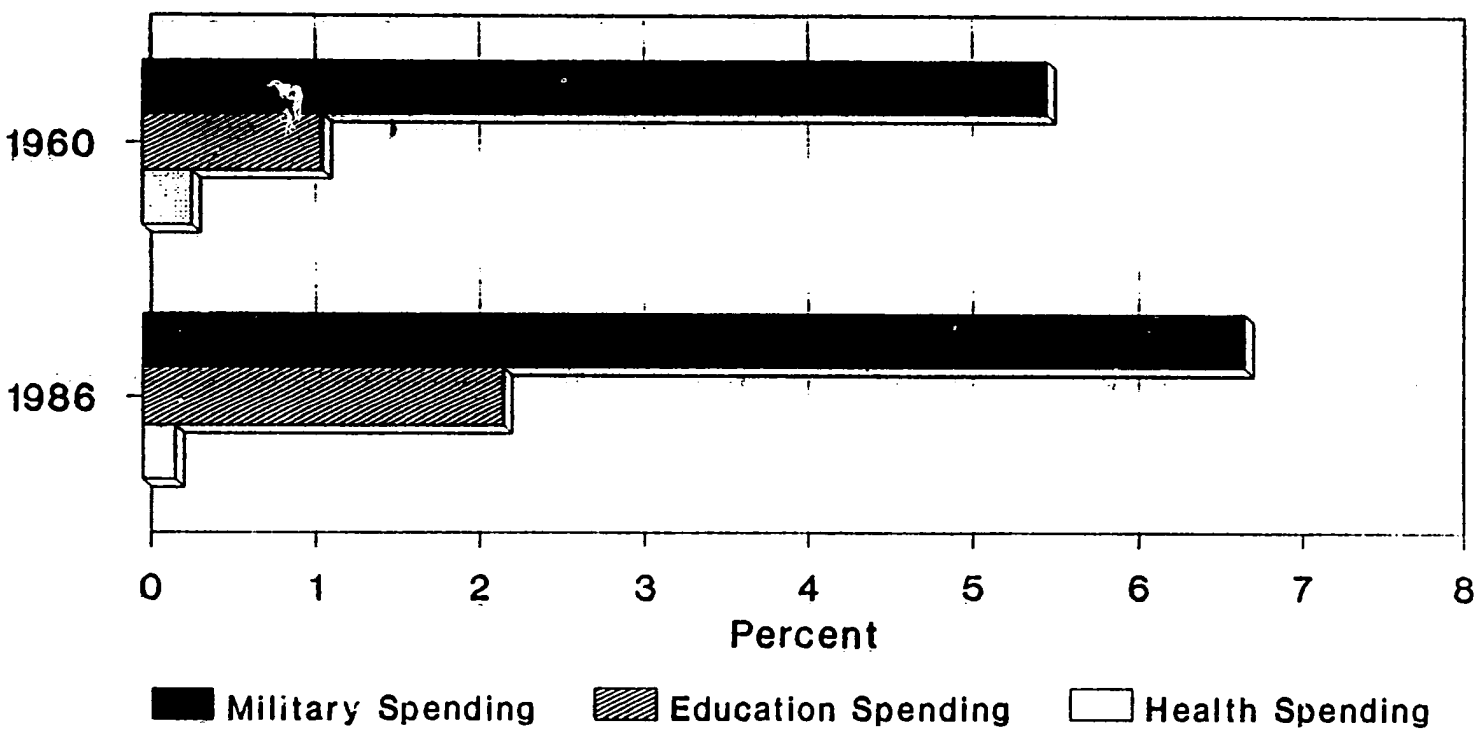
FIGURE 2.7: PAKISTAN
POPULATION WITH ACCESS TO SERVICES, 1985-87
Rural and Urban



	Health	Water	Sanitation	Health	Water	Sanitation
Rural	35 %	27%	6 %			
Urban				99 %	83 %	51 %

SOURCE: UNITED NATIONS, HUMAN DEVELOPMENT REPORT 1990, TABLE 8.

FIGURE 2.8: PAKISTAN SHARE OF GNP SPENDING: MILITARY, EDUCATION, AND HEALTH, 1960 AND 1986



SOURCE: UNITED NATIONS, HUMAN DEVELOPMENT REPORT, 1990.

It is estimated that, at most, only 27 percent of the rural population has access to clean water, and less than 10 percent have hygienic sanitation facilities (Figure 2.7). Although the urban figures are much higher, the coverage in urban slum areas is estimated to be very low. Poor water and sanitation facilities are a primary cause of infectious diseases in Pakistan, and they can also lead to respiratory, skin, and eye diseases. Water-borne diarrheal diseases are the main cause of death among infants and young children. Moreover, since most deliveries take place at home, lack of clean water and hygienic sanitation facilities heightens the chances of infection during and after childbirth. Unhygienic sanitary arrangements inside the compound also make the home environment specially unhealthy for women and children who stay home the most. These conditions are exacerbated in urban areas, particularly in the poorest income groups. Women's restricted movement outside the house and their prolonged exposure to smoke and ash from woodstoves also makes them more prone to respiratory diseases (Pakistan Commission on the Status of Women, 1986; Shah et al., 1986; United Nations, 1990; World Bank, 1989).

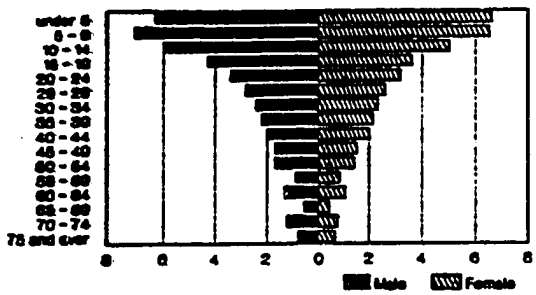
Fertility and poverty are usually directly related. More children are desired in poorer households because of a need for more earning hands and as a form of old age security. In rural areas particularly, the desire for a certain number of sons adds to pressure to have more children. Among other consequences, a high fertility rate means that the proportion of young dependents is very high. While the proportion of the 0-14 age group has decreased in South Asia and in low-income countries generally since 1965, in Pakistan it has increased. More than 44 percent of Pakistan's population is under the age of 15 and approximately 52 percent is between the ages of 15 and 64. This means the ratio of dependents to income-earners is increasing, a fact that puts considerable strain on the budgets of both families and the government.

Pakistan's rapid population growth has produced a very young population in both the rural and urban areas that grows larger every year that fertility remains high. This means that even with dramatic reductions in fertility, the population will continue to grow for at least 40 years as today's children reach reproductive age and have their own children (NIPS, 1989). Figures 2.9, 2.10, and 2.11 illustrate the estimated age structure of Pakistan's population in 1981.

Pakistan's population has doubled in just over 20 years, and is likely to double again in the next 20, unless serious action is taken (Figure 2.12). Its growth rate of about 3.1 percent per year will increasingly strain the capacity of government to deliver services (which are already inadequate) to the people. The high population growth rate since 1951 is largely due to the reductions in overall mortality that have taken place without corresponding reductions in fertility (only about 6 percent in the 1965-85 period), compared to an almost 40 percent decline for all low-income countries. In fact, there is no evidence of any decline in Pakistan's fertility rate since the mid-1970s. This is due in large part to the fact that a woman's status in Pakistan is almost exclusively tied to her reproductive roles. With few alternatives to marriage and bearing children, limited education or exposure to the world outside her family, and little social security outside of bearing sons and complying with her husband's and family's plans for her, a woman's rational survival strategy ironically may lead to her early death. Unless women have other life choices open to them, Pakistan's population growth will undoubtedly continue unchecked.

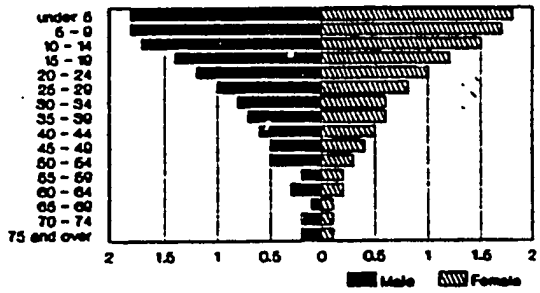
The overall population growth masks important differences in rural/urban distribution, as well as across the four provinces. As Figure 2.13 illustrates, dramatic differences exist in both the growth and distribution of population across the provinces with the greatest growth occurring in Punjab. While the total population of Pakistan is growing at about 3.1 percent per year, the urban population is growing even faster, over 4 percent per year. At this rate of growth, Pakistan's largest city--Karachi-- will grow from a city of 7 or 8 million

FIGURE 2.9: PAKISTAN
POPULATION DISTRIBUTION BY SEX AND AGE
(Estimated: 1981 Census in Millions)



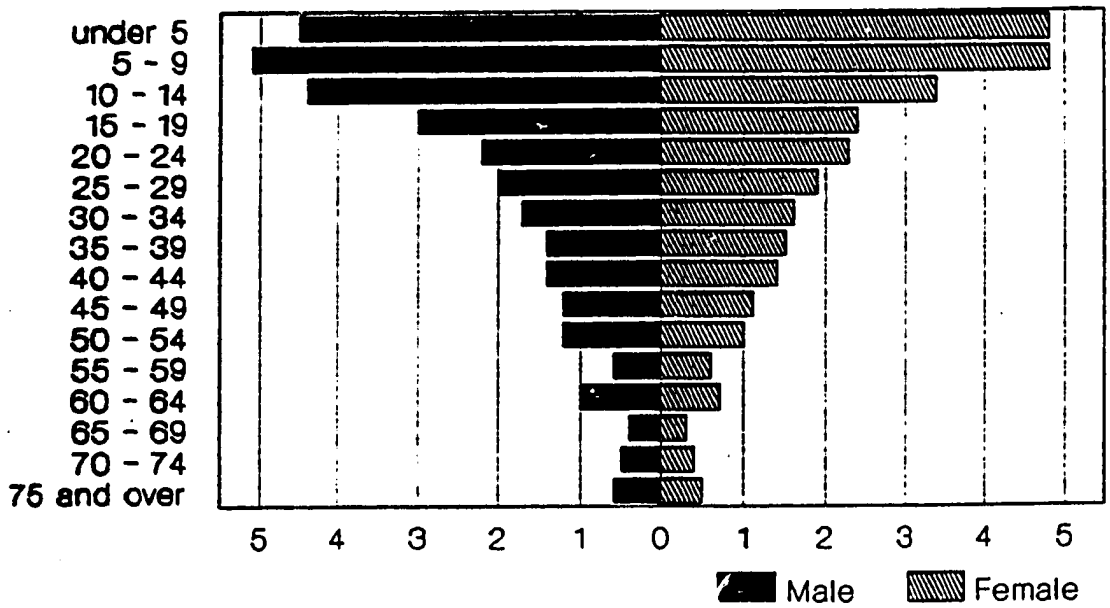
SOURCE: STATISTICAL YEARBOOK OF PAKISTAN, 1988.

FIGURE 2.10: PAKISTAN
POPULATION DISTRIBUTION BY SEX AND AGE (URBAN)
(Estimated: 1981 Census in Millions)



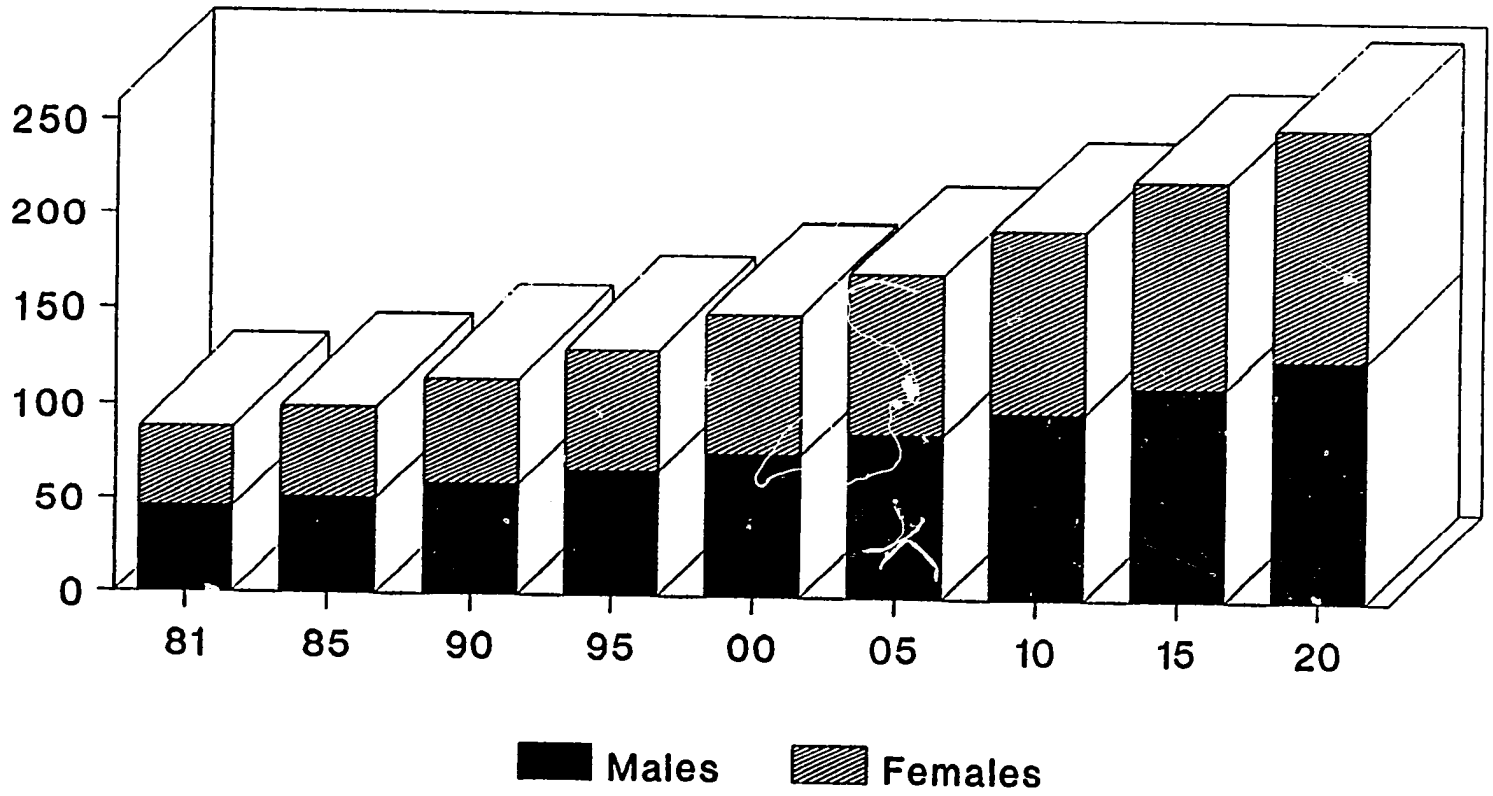
SOURCE: STATISTICAL YEARBOOK OF PAKISTAN, 1988.

FIGURE 2.11: PAKISTAN
POPULATION DISTRIBUTION BY SEX AND AGE (RURAL)
(Estimated: 1981 Census in Millions)



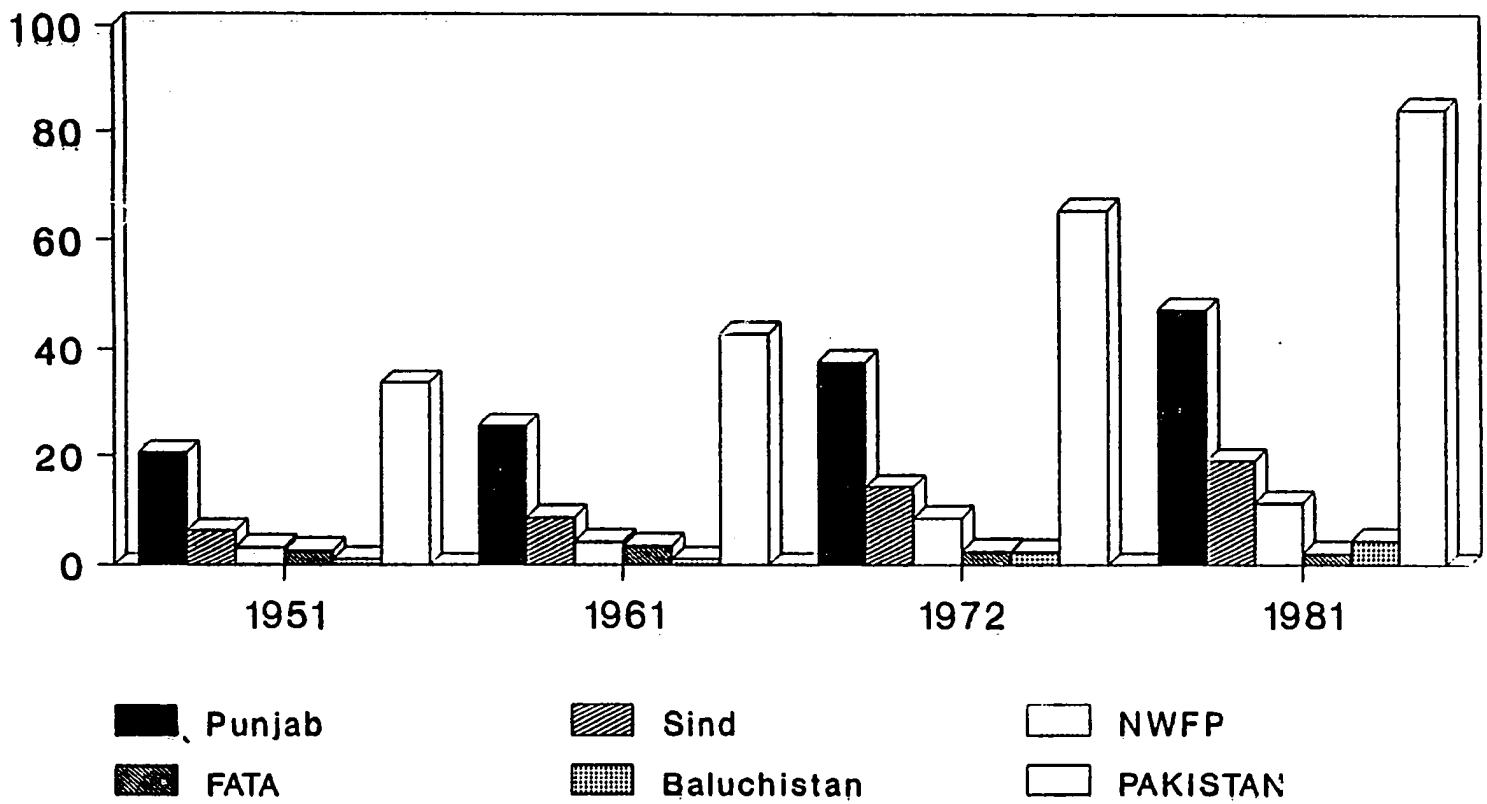
SOURCE: STATISTICAL YEARBOOK OF PAKISTAN, 1988.

FIGURE 2.12: PAKISTAN
PROJECTED POPULATION GROWTH BY SEX, 1981-2050
(Millions)



SOURCE: U.S. BUREAU OF THE CENSUS,
INTERNATIONAL DATA BASE, APRIL, 1990.

FIGURE 2.13: PAKISTAN
POPULATION GROWTH BY PROVINCE, 1951-81
(Millions)



SOURCE: WOMEN IN PAKISTAN, 1985.

(estimated present population) to between 12 and 14 million by 2003. Within 30 years it could grow to 30 million people--larger than any city in the world today. (Mexico City and Sao Paulo have about 15 to 18 million people.)

The high population growth and increasing tendency toward urbanization will place enormous strains on the government to provide basic services and on the economy to provide sufficient food and employment. Within the household, increased population will require increased income-generating capacity to ensure economic survival, as well as increased production of household goods and services to compensate for inadequate supplies outside the household. A major portion of this burden will fall to women.

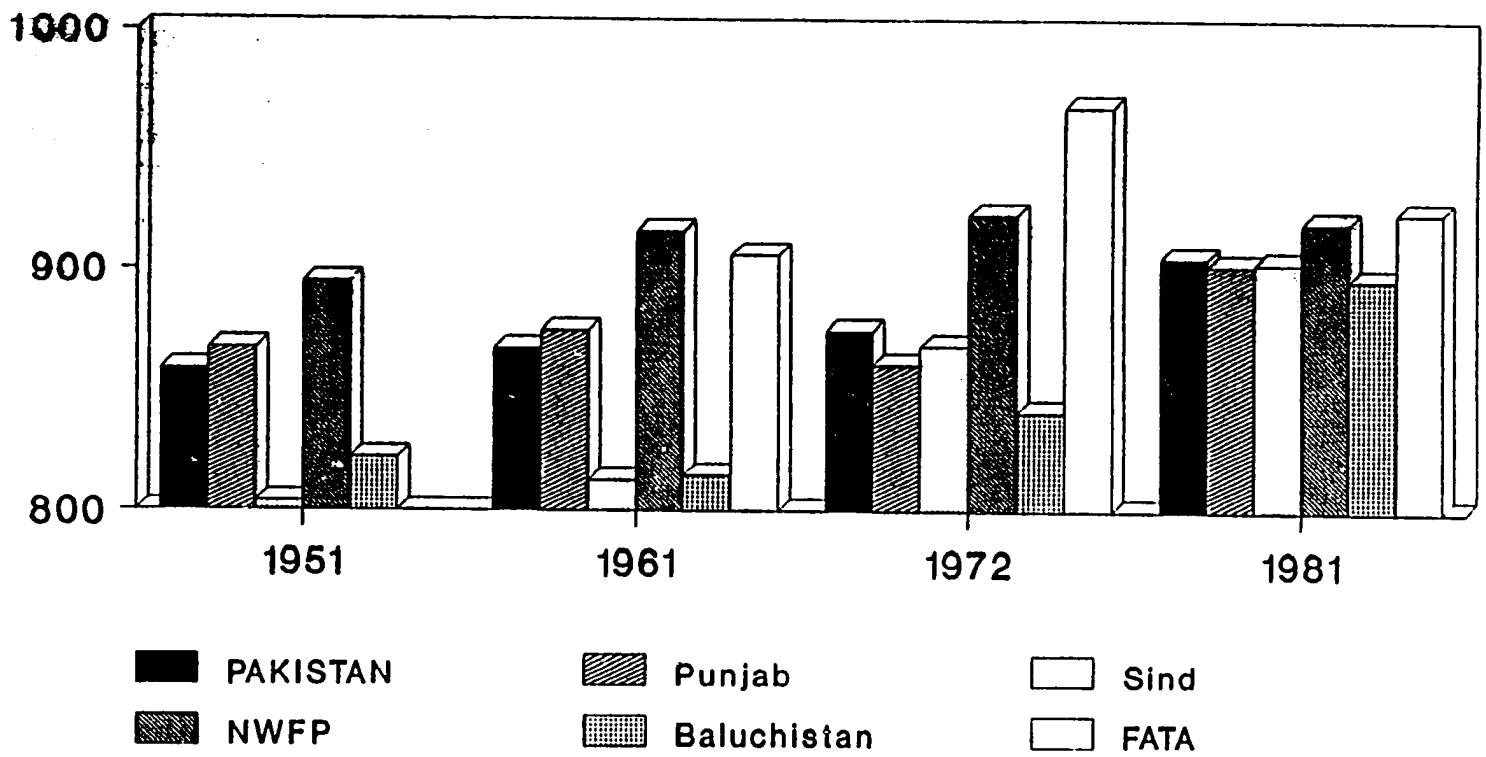
High fertility, high-risk births, and poor health among women are contributing factors to Pakistan's low female to male ratio--which is the lowest in the world. Although the sex ratio has improved since 1951 (Figure 2.14) and the dramatic differences across provinces have begun to even out, Pakistan still has only a little over 900 females for every 1,000 males. This compared in 1985 with 950 for Bangladesh, 970 for developing countries on average, and 1,040 for industrial market economies. For women who do survive, their life expectancy at birth has been consistently lower than Pakistani men's, until recently when the life expectancy for both males and females evened out at 55 years of age (Figure 2.15). Although this is a marked improvement, it is still lower than in most developing countries, and considerably lower than in developed countries where women tend to outlive men by about five years.

C. Education

As with health, the educational status of Pakistani women is among the lowest in the world. This is due, in part, to the general neglect of the educational sector as a whole throughout Pakistan's history. Although government spending on education has more than doubled between 1960 and the mid-1980s, the share of GNP devoted to education is only slightly over 2 percent (Figure 2.8). And of this amount, only 40 percent is devoted to primary education (United Nations, 1990). Although this implies severe constraints for the entire population vis-à-vis education, girls are substantially more disadvantaged than boys. Although the number of girls enrolled in school more than doubled between 1961 and 1981, the gaps between male and female enrollment levels remains considerable (Figure 2.16). Differences in enrollment are significant across all age groups, but they are particularly dramatic in the rural sector (Figure 2.17) where the number of girls enrolled in school drops substantially after age 14. School completion rates also show wide disparities between rural and urban locations and between males and females (Figures 2.18, 2.19, and 2.20). It is estimated that in 1985/86 only about one third of the five-year old girls living in rural areas were in school and fewer than one sixth of them completed five years of education--considered the minimum level for achieving literacy (World Bank, 1989).

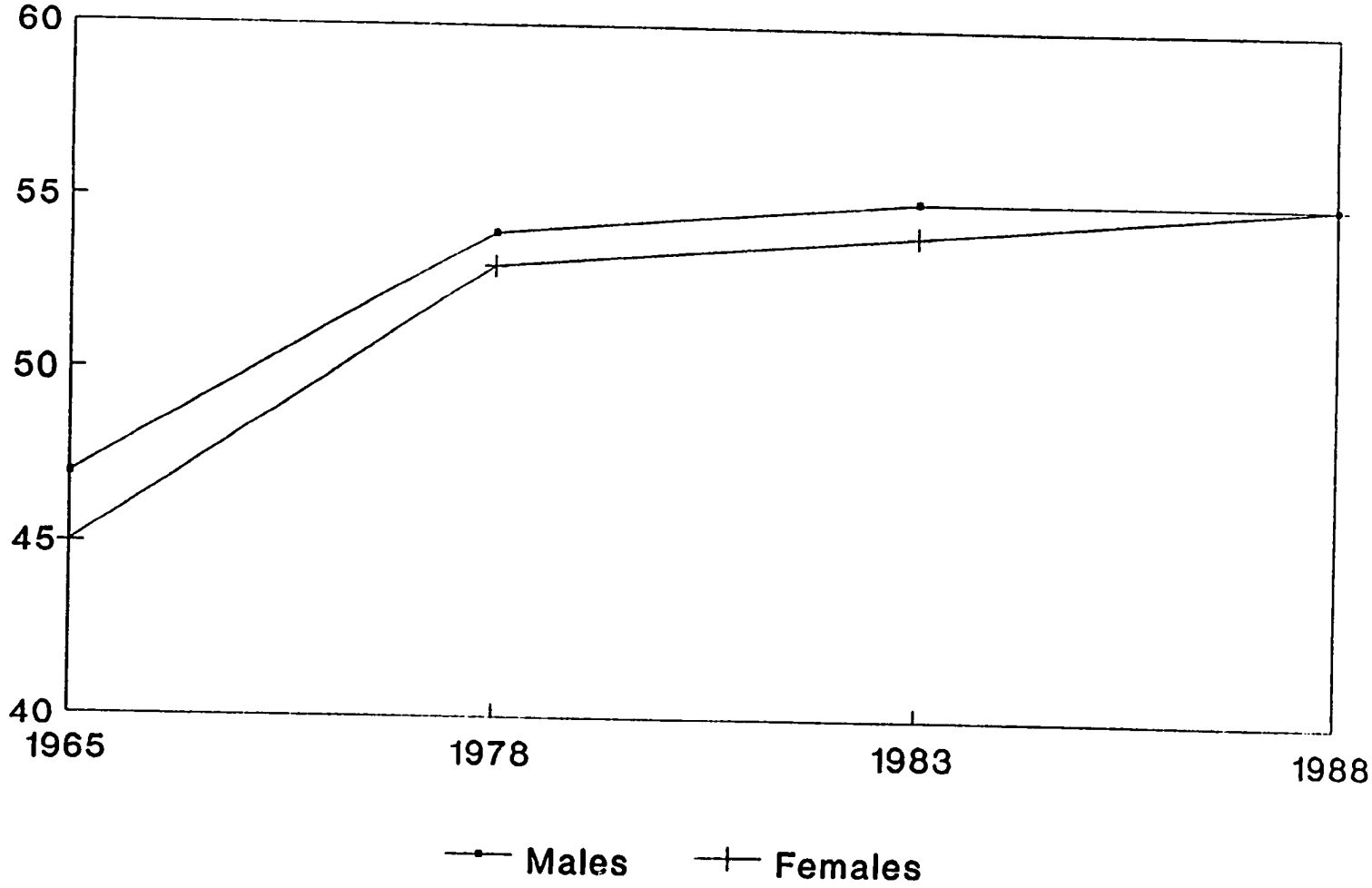
Gross participation rates for boys and girls in primary school (grades one through five, ages five to nine) have recently been estimated to be about 71 percent and 38 percent, respectively, including a substantial number of over- and under-age children and repeaters. Disparities are even greater between boys and girls and between urban and rural sectors at the secondary and tertiary levels. Considerable disparities exist across provinces as well. Although gross enrollment rates, or participation ratios (the percentage of the population between five and nine that is enrolled), have increased over the past decade, wide disparities continue. Rates have increased from between 35 percent and 50 percent for Punjab, Sind and NWFP, to about 55 percent for all of them, indicating a trend toward less disparity. The notable exception is Baluchistan which has tended to lag 20 percentage points below the other provinces (Figure 2.21). Similar disparities are reflected in total participation rates across provinces. While most of Pakistan has achieved close to 60 percent participation, Baluchistan lags

FIGURE 2.14: PAKISTAN SEX RATIO BY PROVINCE, 1951-81
(Females Per 1,000 Males)



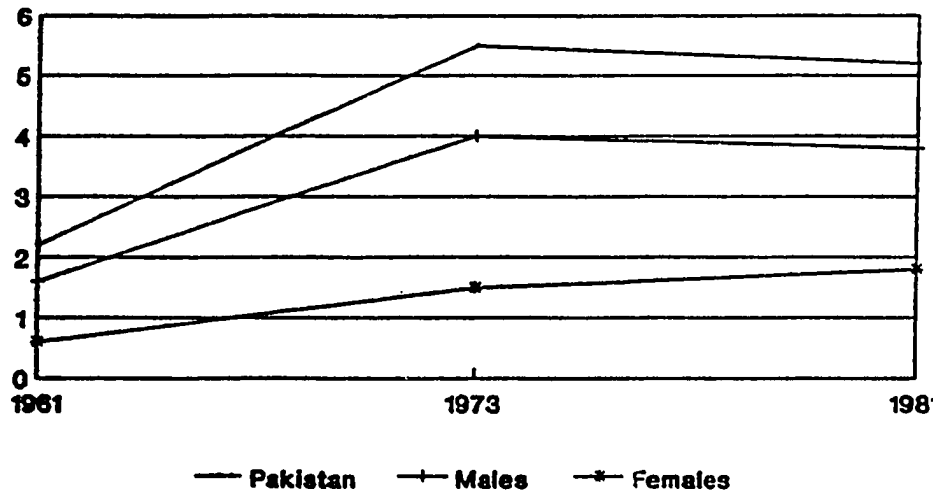
SOURCE: WORLD BANK, 1985: WOMEN IN PAKISTAN.

FIGURE 2.15: PAKISTAN
LIFE EXPECTANCY BY SEX, 1965, 1978, 1983, AND 1988



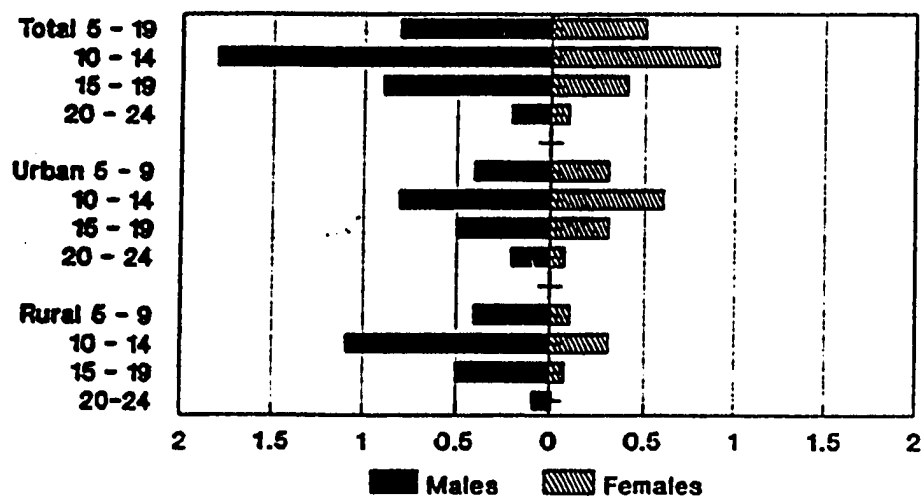
SOURCES: GOVERNMENT OF PAKISTAN, STATISTICAL PROFILE OF WOMEN IN PAKISTAN, 1986; WORLD BANK, WORLD DEVELOPMENT REPORT, 1990.

FIGURE 2.16: PAKISTAN
POPULATION ENROLLED IN SCHOOL, 1961, 1973, AND 1981
(Millions)



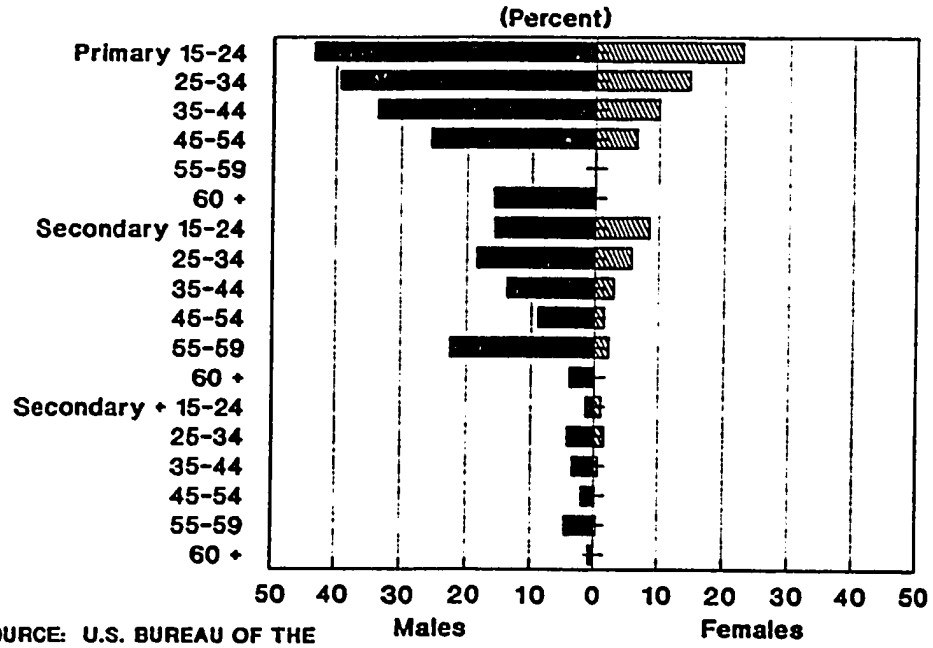
SOURCES: WORLD BANK, 1989; GOVT. OF PAKISTAN, STATISTICAL PROFILE OF WOMEN IN PAKISTAN.

FIGURE 2.17: PAKISTAN
SCHOOL ENROLLMENTS BY AGE, SEX, AND URBAN/RURAL LOCATION, 1981
(Millions)



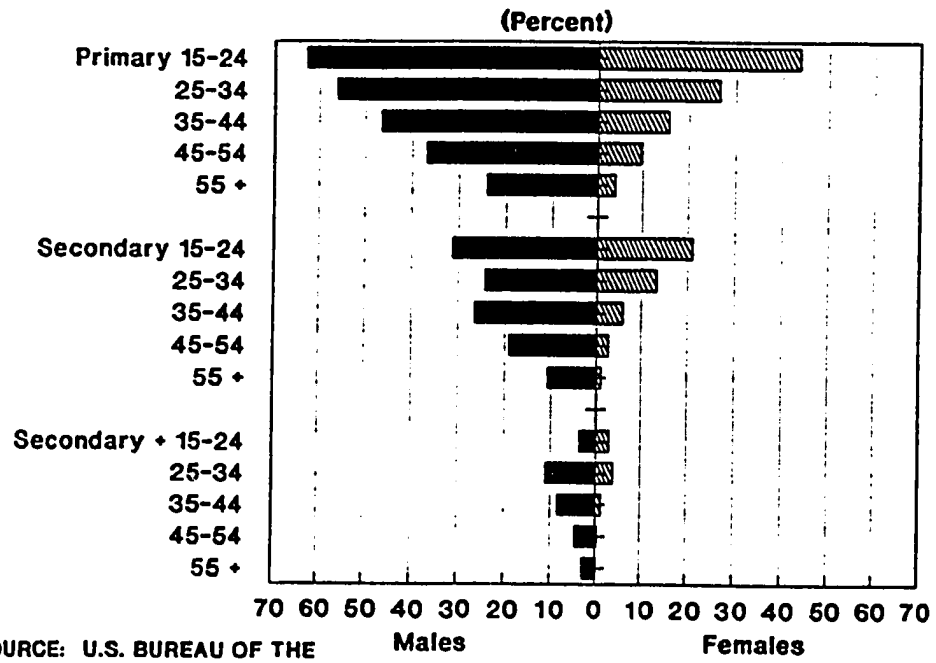
SOURCE: U.S. BUREAU OF THE CENSUS, INTERNATIONAL DATA BASE, APRIL 1990.

FIGURE 2.18: PAKISTAN
EDUCATIONAL ATTAINMENT BY AGE AND SEX, 1981



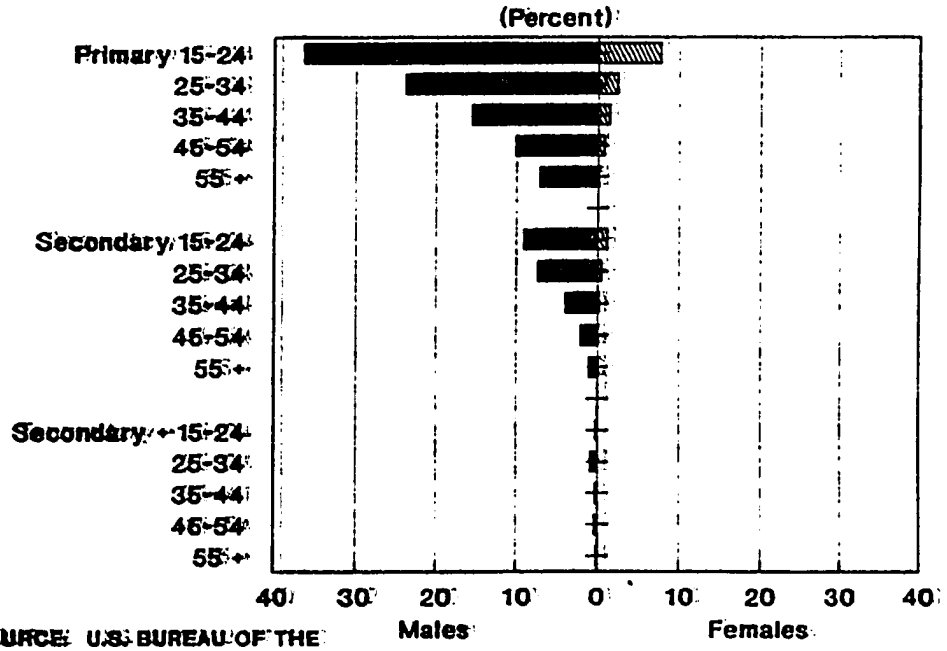
SOURCE: U.S. BUREAU OF THE CENSUS, INTERNATIONAL DATA BASE FOR PAKISTAN, APRIL, 1990.

FIGURE 2.19: PAKISTAN
EDUCATIONAL ATTAINMENT BY AGE AND SEX (URBAN), 1976



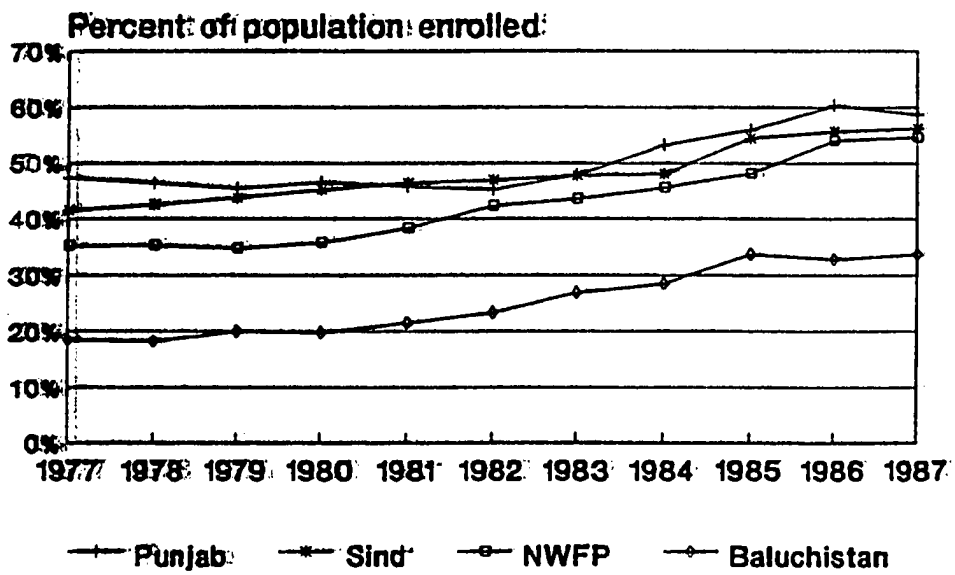
SOURCE: U.S. BUREAU OF THE CENSUS, INTERNATIONAL DATA BASE FOR PAKISTAN, APRIL, 1990.

FIGURE 2.20: PAKISTAN
EDUCATIONAL ATTAINMENT BY AGE AND SEX (RURAL), 1976



SOURCE: U.S. BUREAU OF THE CENSUS, INTERNATIONAL DATA BASE FOR PAKISTAN, APRIL, 1990.

FIGURE 2.21: PAKISTAN
PARTICIPATION RATIOS, 1977-87



Note: all numbers used in this presentation are approximate and show only rough regional differences and trends.

SOURCE: RESEARCH TRIANGLE INSTITUTE, 1990.

far behind (Figure 2.22). When only female enrollments are considered, disparities are more apparent. Except for Punjab, all provinces have participation rates well under 50 percent (Figure 2.23) (Research Triangle Institute, 1990).

In 1985, Pakistan's female primary school enrollment (PSE) ratio was 32 percent, among the ten lowest in the world. (Apart from Bhutan and Yemen, all the others are in Africa.) There are only five countries with a lower ratio of female-to-male PSE than Pakistan's 47 percent, the lowest among Asian countries. While Pakistani women did some catching up in PSEs between 1965 and 1985, the gap between female and male secondary school enrollments (SSEs) widened compared with that in other low-income countries. Thus, the ratio of females to males in Pakistan's SSE improved from 25 percent to 34 percent, due in part to stagnation of the PSE for males, while the average for low-income countries as a whole improved from 39 percent to 60 percent. Furthermore, the improvements at the primary level had taken place by 1976, after which the PSE ratio stagnated. In fact, the total PSE (male and female) actually declined between 1976 and 1985, perhaps the only country in the world where this happened (World Bank, 1989).

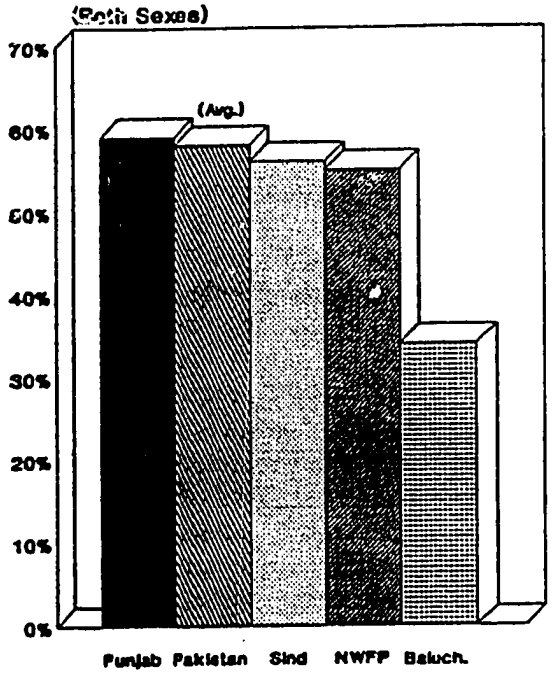
Several factors--social and economic--constrain girls' participation in education. Purdah observance restricts girls' mobility outside the home and makes it necessary for separate schools to be provided for boys and girls. Even where separate schools do exist, often parents are reluctant to allow girls to travel to them (especially over long distances) without supervision--implying a potentially higher cost to educating girls. As girls traditionally leave their parents' home to live with their husband's kin group, less direct economic return to the parental family is attached to educating girls than boys, who are viewed as the parents' source of social security. Girls' household labor is often needed at home to assist their overburdened mothers. School hours often conflict with household work, care of livestock, and seasonal labor responsibilities in agriculture. Girls often take over the caretaking tasks for younger brothers and sisters or participate in informal piece-work labor in the home to raise money for their dowries (Altomare, 1990; Mohiuddin, 1989; and Shaheed and Mumtaz, n.d.).

Shortages of schools specifically for girls and shortages of female teachers--resulting both from low female educational attainment and from restrictions placed on women's mobility and hence ability to teach in areas distant from their homes--place severe hindrances on policies that seek to increase girls' enrollment and completion rates in school. Rapid population growth further exacerbates this crucial development problem. According to the National Institute for Population Studies (1989), with continued rapid population growth, the number of school-age children will increase from under 10 million estimated in 1988 to over 25 million in only 15 years (2003). Even with a strong population planning program, the number is estimated to be around 24 million because a decline in fertility would not begin early enough to affect the number significantly (NIPS, 1989).

Currently, growth rates in school enrollments are about double population growth rates. The average school enrollment growth rate for Pakistan is approximately 6.4 percent with the slowest increase occurring in Punjab and the highest in Baluchistan (Figure 2.24). Although this implies that the education/population gap is narrowing, at current rates of growth, Pakistan is not likely to approach universal primary education until well into the second decade of the 21st century (Figure 2.25) (Research Triangle Institute, 1990).

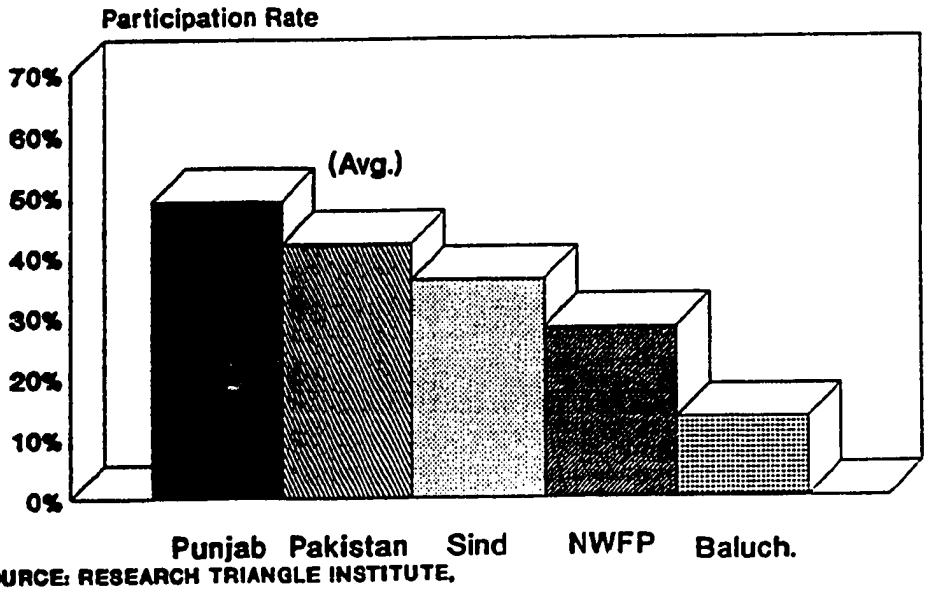
Obviously, enrollments can only continue to increase at current rates if the supply of teachers and classrooms keeps pace. Looking only at Baluchistan, the province with the highest enrollment growth rates and the greatest education gap to cover, it is clear that the pressures that will be placed on government spending will be enormous. At current enrollment growth rates, the number of boys enrolled by the end of the decade will

FIGURE 2.22: PAKISTAN
REGIONAL DISPARITIES IN EDUCATIONAL PARTICIPATION



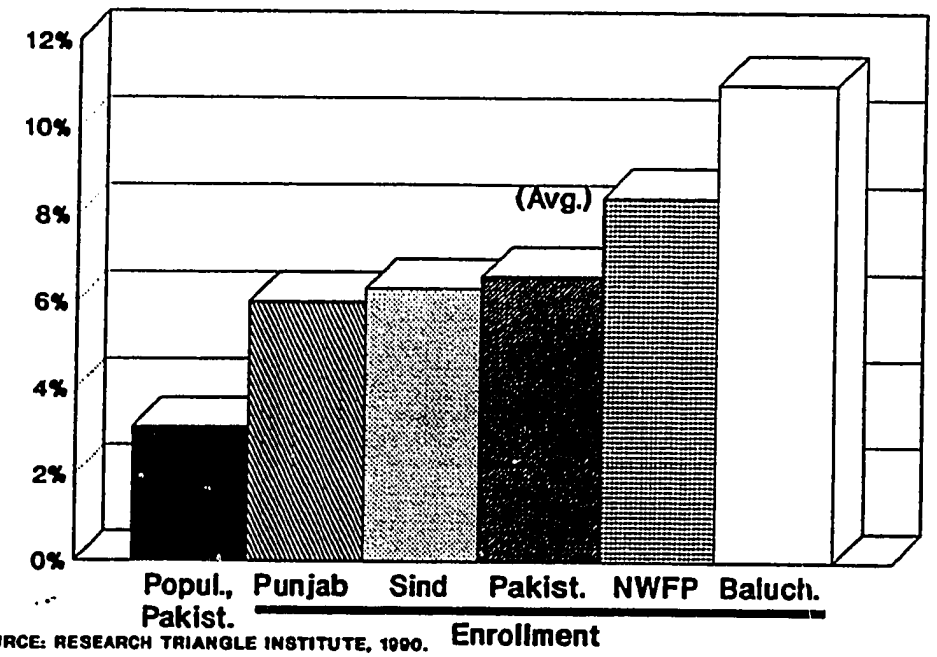
SOURCE: RESEARCH TRIANGLE INSTITUTE, 1990.

FIGURE 2.23: PAKISTAN
REGIONAL DISPARITIES IN EDUCATIONAL PARTICIPATION
(Female)



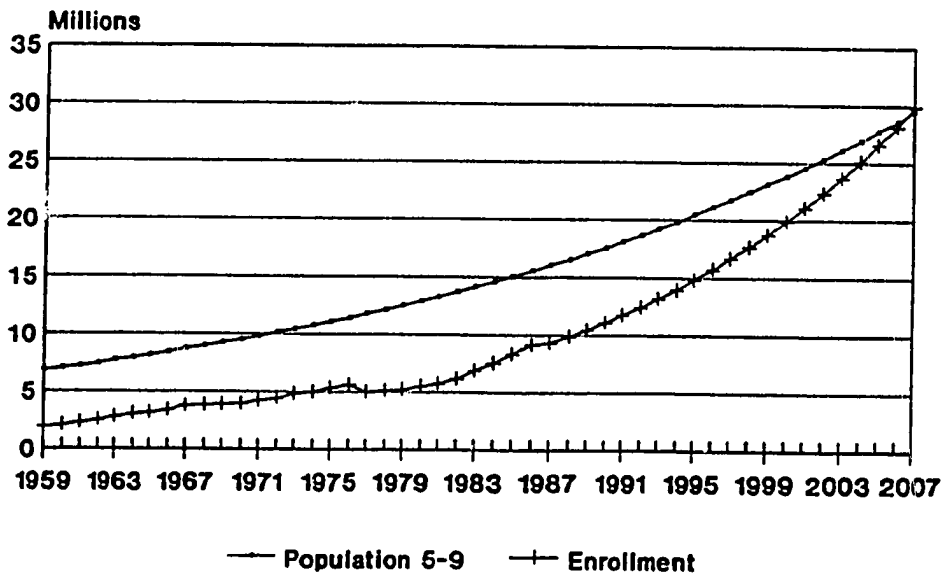
SOURCE: RESEARCH TRIANGLE INSTITUTE, 1990.

FIGURE 2.24: PAKISTAN
POPULATION AND ENROLLMENT GROWTH RATES



SOURCE: RESEARCH TRIANGLE INSTITUTE, 1990.

FIGURE 2.25: PAKISTAN
LONG-TERM POPULATION AND ENROLLMENT



SOURCE: RESEARCH TRIANGLE INSTITUTE, 1990.

almost double (Figure 2.26) while nearly four times as many girls will be enrolled (Figure 2.27). This implies a need for a dramatic increase in both male and female teachers and in boys' and girls' schools over current capacity. The most dramatic increase required, not surprisingly, is in female teachers and girls' schools (Figures 2.28, 2.29, 2.30, and 2.31) (Research Triangle Institute, 1990).

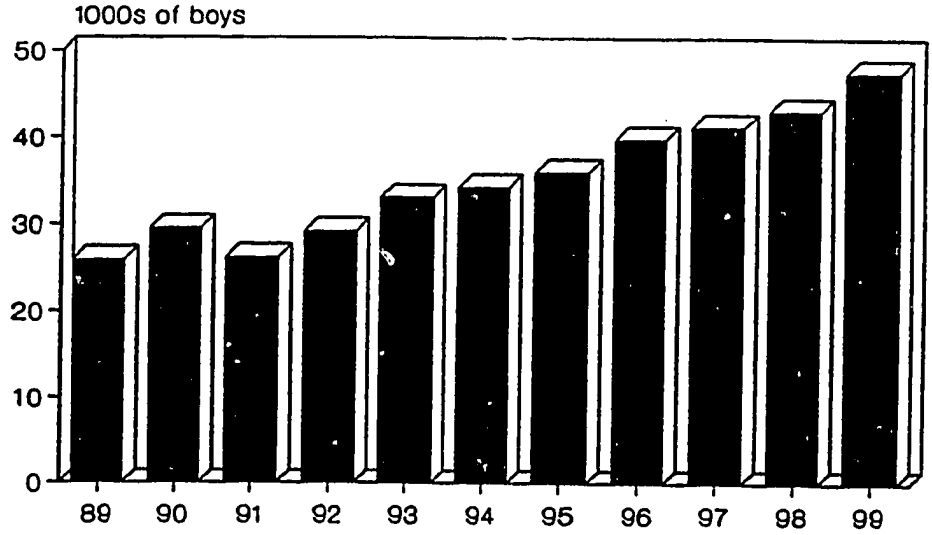
There is increasing evidence that educating females is critical for the achievement of key social and economic goals in developing countries. The positive effect of education, especially female education, on infant and child survival has been documented for a number of developing countries (Caldwell, 1986; Cochrane, Leslie, and O'Hara, 1982; Cochrane, O'Hara and Leslie, 1980; D'Souza & Bhuiza, 1982; Hobcraft, McDonald, and Rutstein, 1984; LeVine, 1987). Caldwell (1979) suggests that maternal education is, perhaps, the greatest force at work in a child's survival chances. A mother's level of education can affect child welfare significantly through enhanced child health and nutrition (Blumberg, 1989; Cornia et al., 1987; Leisinger, 1985, 1989). Blumberg notes that given the mother's direct role in food selection and preparation, increased education can be expected to translate directly into better child nutrition. It is also likely that women with access to education have improved income-generating potential in both the formal and informal sectors. Studies indicate that poor nutrition in the under-five age group can result in permanent physical and mental damage. Educating mothers not only leads to a greater quantity of food for these children, but also more nutritious preparation of the food. Mothers' literacy and education have also been linked positively with improved health care leading not only to higher survival rates, but also to healthier physical and mental development among their children. As more children survive to attend school, educated mothers are more likely than non-educated mothers to help their children and encourage them to remain in school.

Improving women's education and literacy levels clearly has positive implications not only for improved life expectancy and improved quality of life for their families, but also for strengthening the human capital and the general welfare of their countries. Blumberg notes that mothers' education has a stronger effect than fathers' education or an education variable not disaggregated by gender on lower fertility, lower infant mortality, and improved health and nutrition (Blumberg, 1989). Undeniably, educating females promises multiple and high returns on the time and resources invested. Conversely, not educating females carries multiple and high costs in human and economic development. This means that policies supporting girls' education have far-reaching social and economic impacts over the medium and long term. Pakistan's history of social sector neglect and its emphasis on short-term economic returns must change dramatically if these positive impacts are to take effect.

But education is not sufficient. Educated mothers in Pakistan may contribute significantly to increasing family welfare, but if women do not have viable alternatives to producing children as their primary measure of social worth, the population growth in Pakistan not only may not decrease, but may, in fact, increase as the crude death rate decreases even further.

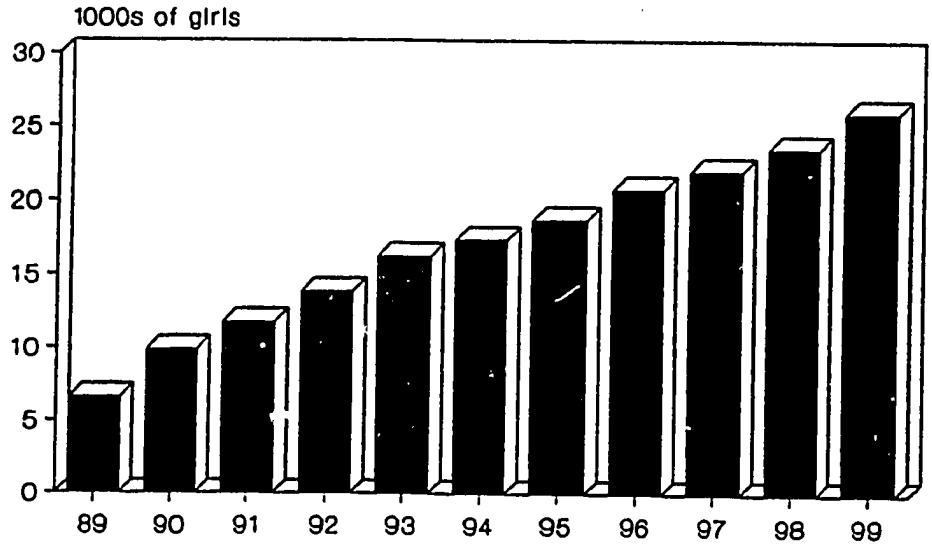
Current education levels have produced a population ill-equipped to respond to new economic opportunities. This is clearly reflected in the differential literacy rates found in Pakistan. Once again, the urban/rural and male/female disparities are dramatic, ranging from about 55 percent male literacy in urban Pakistan to about 7 percent for females in rural Pakistan (Figure 2.32). Even with increases in enrollment and improvements in literacy, women in Pakistan will face severe constraints to improving their productivity and level of economic participation.

FIGURE 2.26: PAKISTAN
ADDITIONAL ENROLLMENT IN BALUCHISTAN
(Yearly Increment; Boys)



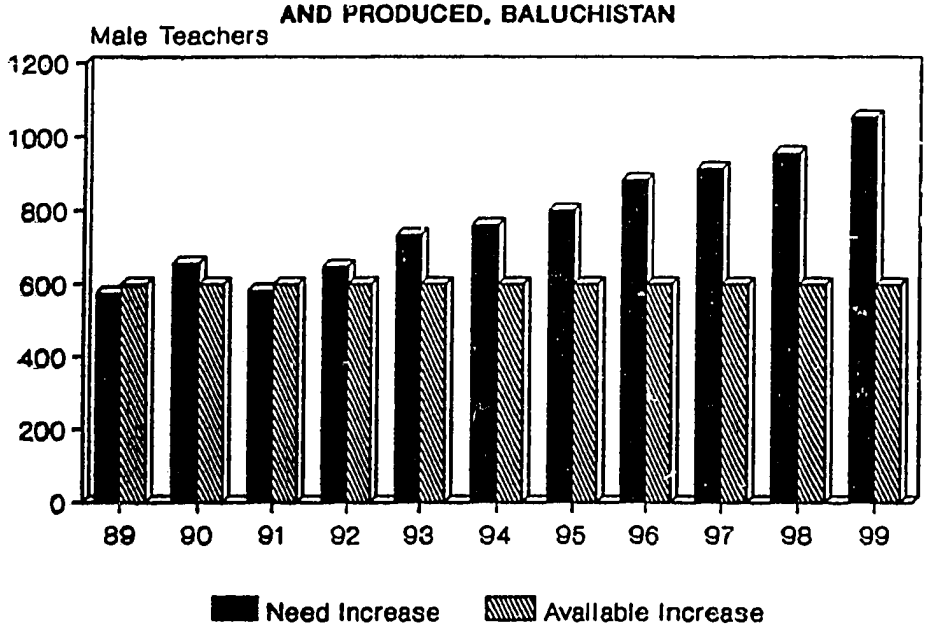
SOURCE:RESEARCH TRIANGLE INSTITUTE,1990.

FIGURE 2.27: PAKISTAN
ADDITIONAL ENROLLMENT IN BALUCHISTAN
(Yearly Increment; Girls)



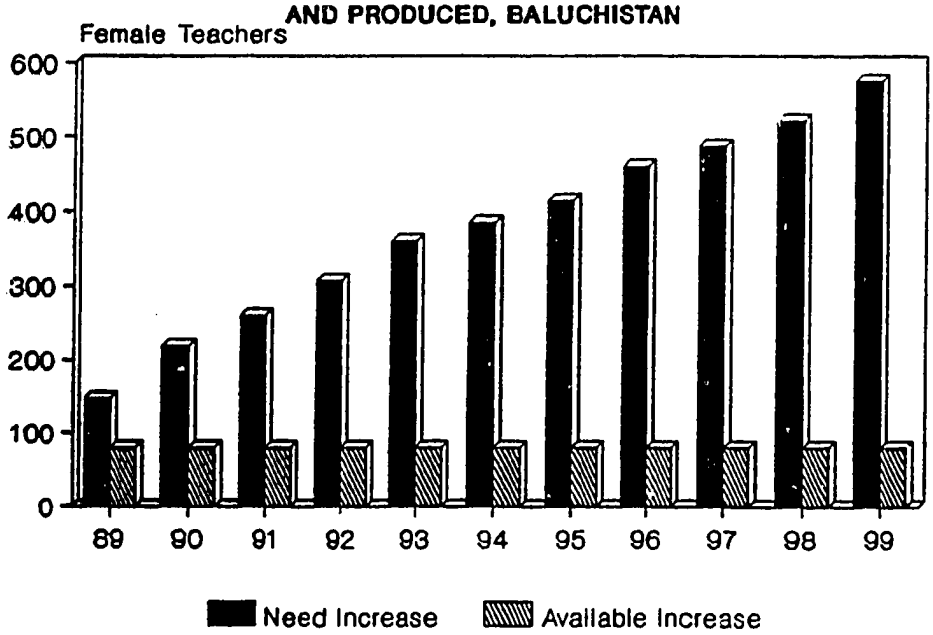
SOURCE:RESEARCH TRIANGLE INSTITUTE,1990.

FIGURE 2.28: PAKISTAN
YEARLY TEACHER DEFICIT, NEW MALE TEACHERS NEEDED AND PRODUCED, BALUCHISTAN



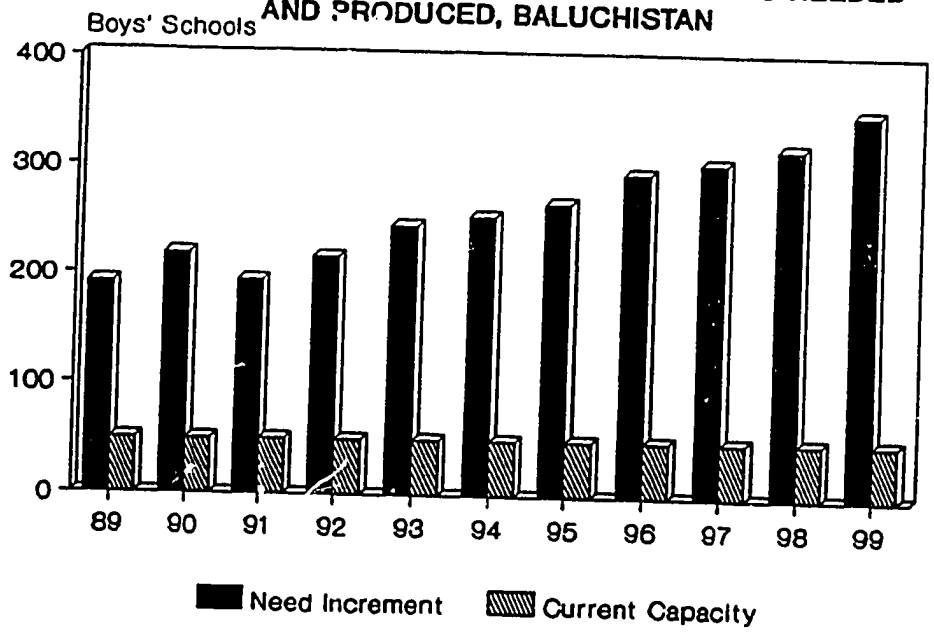
ASSUMES 45 STUDENTS/TEACHER
SOURCE:RESEARCH TRIANGLE INSTITUTE,1990.

FIGURE 2.29: PAKISTAN
YEARLY TEACHER DEFICIT, NEW FEMALE TEACHERS NEEDED AND PRODUCED, BALUCHISTAN



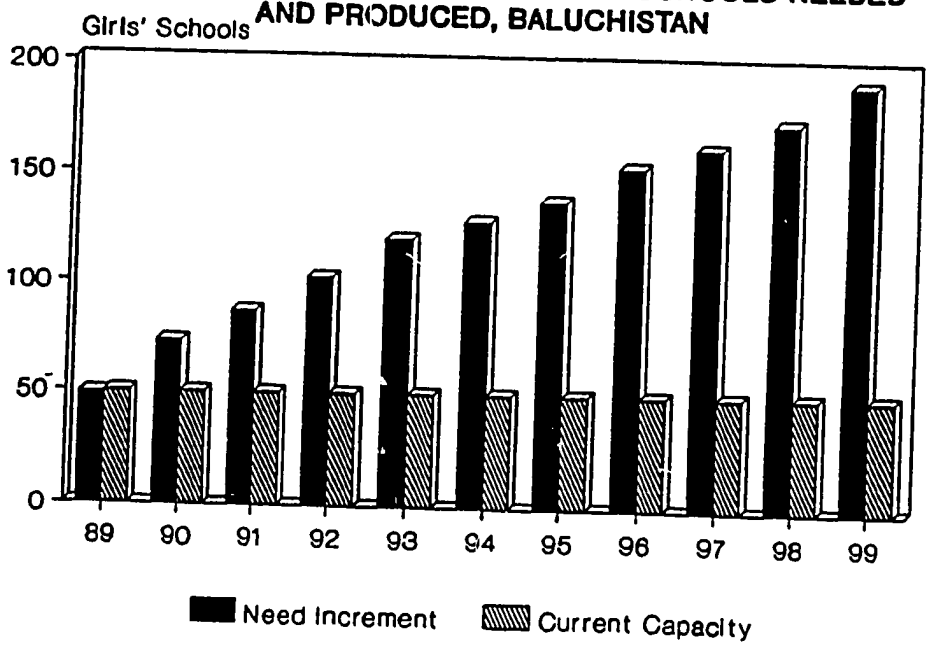
ASSUMES 45 STUDENTS/TEACHER
SOURCE:RESEARCH TRIANGLE INSTITUTE,1990.

FIGURE 2.30: PAKISTAN
YEARLY SCHOOL DEFICIT, NEW BOYS' SCHOOLS NEEDED AND PRODUCED, BALUCHISTAN



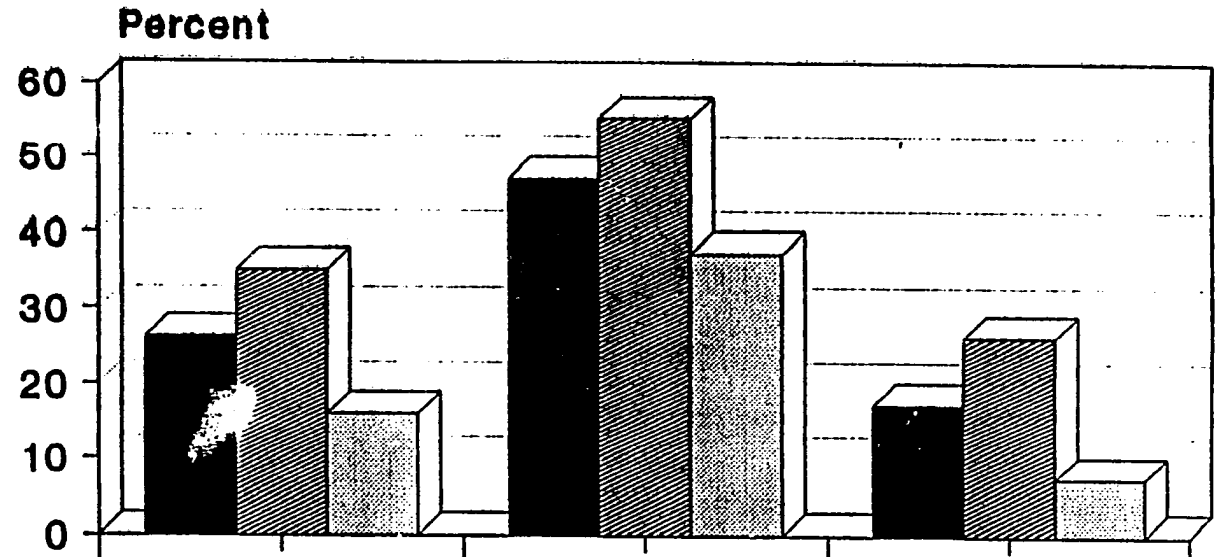
ASSUME 45 STUD./CLASS, 3 CLASSES/SCHOOL
SOURCE:RESEARCH TRIANGLE INSTITUTE,1990.

FIGURE 2.31: PAKISTAN
YEARLY SCHOOL DEFICIT, NEW GIRLS' SCHOOLS NEEDED AND PRODUCED, BALUCHISTAN



ASSUMES 45 STUD./CLASS, 3 CLASSES/SCHOOL
SOURCE:RESEARCH TRIANGLE INSTITUTE,1990.

FIGURE 2.32: PAKISTAN
LITERACY BY SEX AND RURAL/URBAN LOCATION, 1981



	Pakistan	Urban	Rural
Total Population	26.2	47.1	17.3
Males	35.1	55.3	26.2
Females	16	37.3	7.3

Total Population Males Females

SOURCE: U.S. BUREAU OF THE CENSUS, INTERNATIONAL DATA BASE FOR PAKISTAN, JULY, 1990.

D. Productive Activities and Economic Participation

The official statistics on Pakistani women's economic participation reflect the combined effects of their high level of purdah observance and low level of human resource development. There is low social value attached to women's economic activities outside the home and high status associated with the ability of women to observe purdah. Consequently, even when women must work out of economic necessity, their activities are often underreported, if acknowledged at all by their husbands and families. In general, as incomes rise, women withdraw from outside economic activities as a mark of increased family status. The primary exception to this trend is among privileged, educated, and predominantly urban women among whom purdah is less frequently practiced and economic participation, usually in professional fields, is more common.

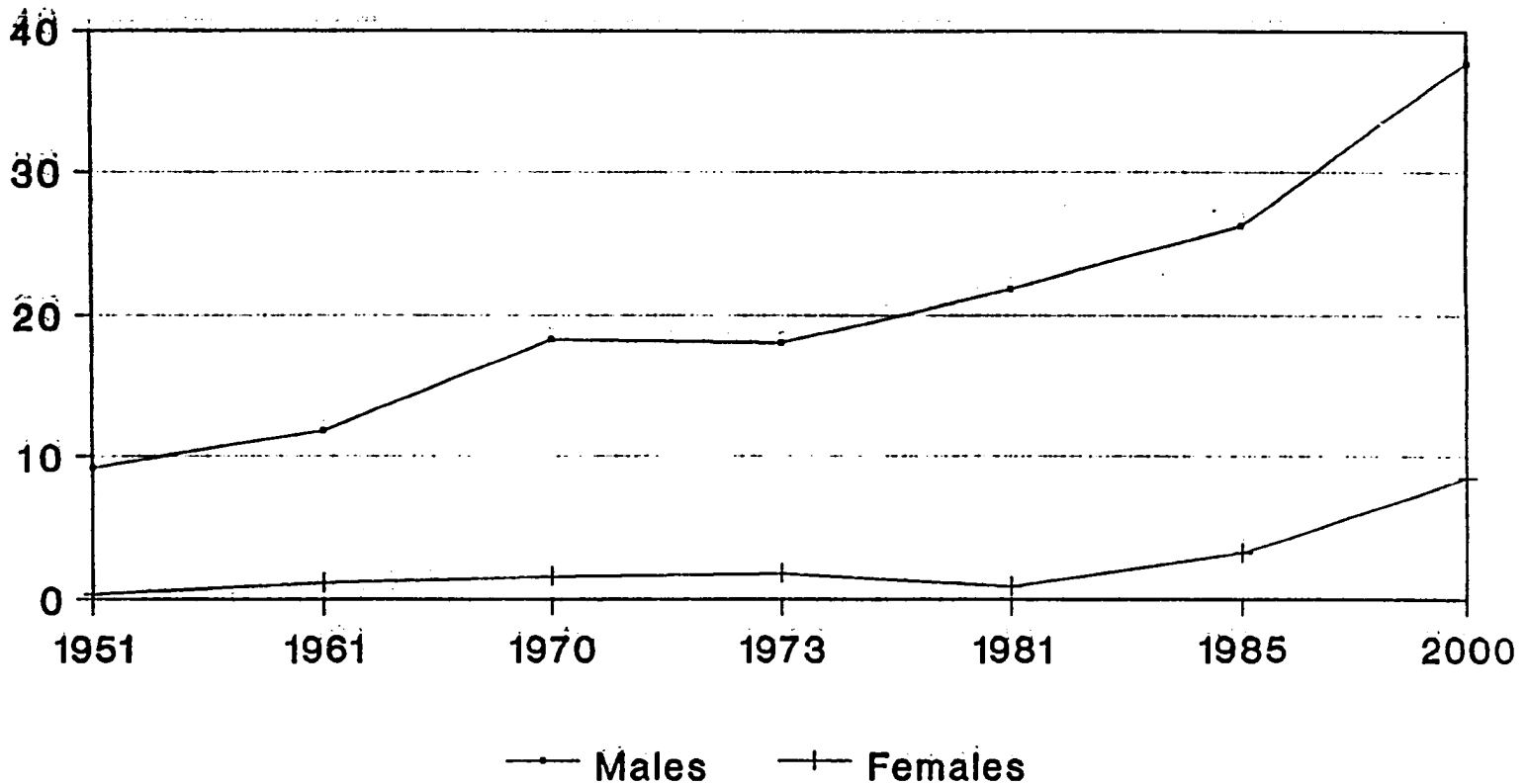
Despite the low official estimates, women in Pakistan are undeniably active in productive activities that contribute significantly to family survival and well-being. Their confinement to the home reinforces societal practices that encourage large families. With limited access to labor-saving devices, many people to care for, and meager family resources, the average Pakistani woman works more hours each day than the average Pakistani man (Pakistan Commission on the Status of Women, 1986; Shah et al., 1986; World Bank, 1989) whether her family lives in the rural sector or urban katchi adabis (slum areas).

Although the economically active population of Pakistan has been increasing in absolute numbers since 1951, considerable disparities exist between males and females (Figure 2.33). Less than one third of Pakistan's population is classified as economically active. The 1987-88 Labor Force Survey estimates labor force participation for both sexes to be approximately 29 percent. However, when the economically active population is broken down by sex, wide disparities are revealed: males constitute 26 percent and females a mere 3 percent (Figure 2.34). The labor force participation rate indicates greater formal participation for both males and females in the rural areas than in the urban areas and greater unemployment for both males and females in the urban areas (Figure 2.35). The official unemployment rate is estimated at 3 percent for the country as a whole, 4 percent for males, and 1 percent for females (Figure 2.36) (Government of Pakistan, 1989).

An examination of the labor force participation rates across provinces shows that the greatest female participation rate is in Punjab at nearly 10 percent in the rural sector whereas, on average, male participation rates in both sectors range between 45 and 55 percent (Figure 2.37). The female labor force participation rates in the urban areas is less than half that of the rural areas, while unemployment is over three times as large. With the trends indicating a rapid rate of urbanization, female urban unemployment--even at current underreported rates--may increase significantly. Across provinces, urban unemployment rates for women are significantly higher than for rural areas.

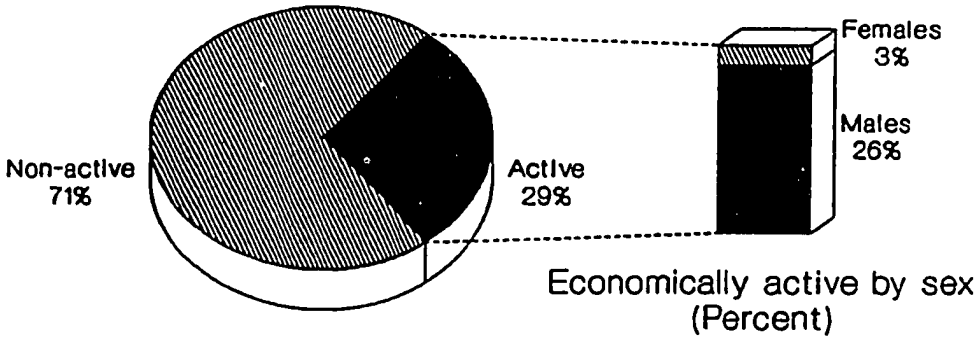
As expected, across all industry (Figures 2.38-2.43), occupation (Figures 2.44-2.46), and status (Figures 2.47-2.49) groups, male workers dramatically outnumber female workers. By industry, only Community, Social and Personal Services shows a consistent increase in the number of females employed corresponding to the number of men employed from 1961 to 1981 (Figure 2.42). In Agriculture, Animal Husbandry, Hunting, and Fishing, in fact, the number of females decreased in contrast to the increase in males employed (Figure 2.38). Across major occupation groups, some increase for female employment has taken place under the category of Scientists, Technical, Professional and Related (Figure 2.44) workers while declines have been experienced among the Agriculture, Animal Husbandry, Hunting, and Fishing workers (Figure 2.45). In terms of status groups, it is interesting to note the significant increase in women's representation among urban employers and own account workers between 1973 and 1981 and the near doubling of women wage earners in the urban sector.

FIGURE 2.33: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX,
SELECTED YEARS, 1951-2000
(Millions)



SOURCES: UN COMPENDIUM OF STATISTICS AND INDICATORS ON THE SITUATION OF WOMEN, 1989; U.S. CENSUS BUREAU, APRIL, 1990.

FIGURE 2.34: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX AS A PERCENT OF TOTAL POPULATION

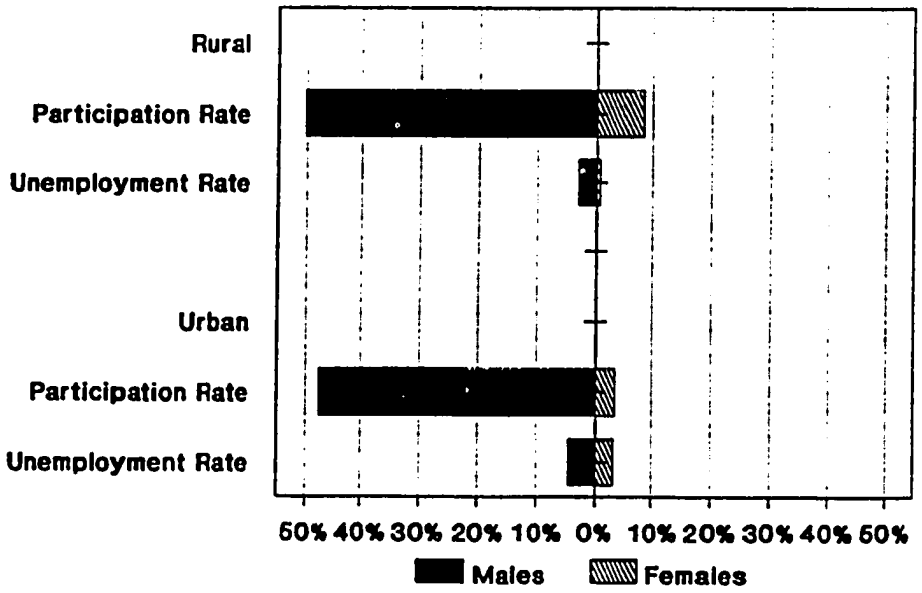


Economically Active and Non-Active Population (Percent)

Distribution of Non-Active Pop. by sex: **Males: 26%** **Females: 45%**

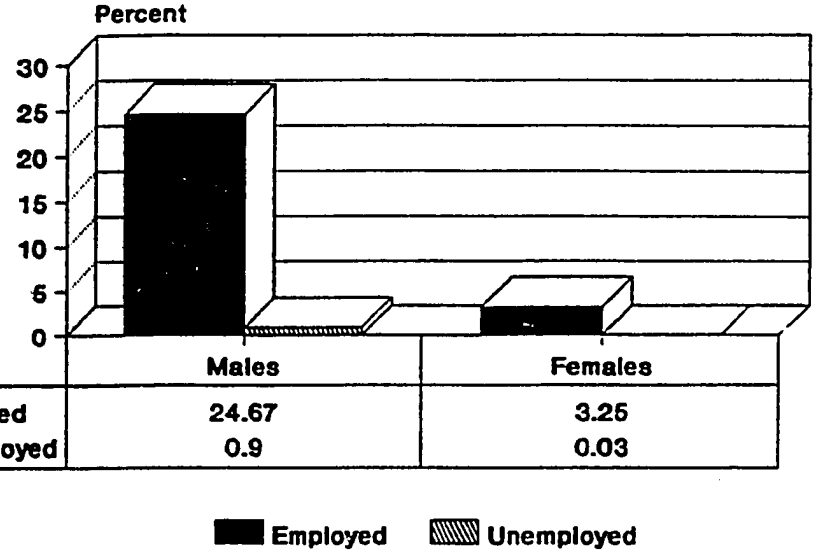
SOURCE: GOVERNMENT OF PAKISTAN, LABOUR FORCE SURVEY, 1987/88.

FIGURE 2.35: PAKISTAN
LABOR FORCE PARTICIPATION RATES BY SEX AND BY RURAL/URBAN LOCATION



SOURCE: GOVERNMENT OF PAKISTAN, LABOUR FORCE SURVEY, 1987/88.

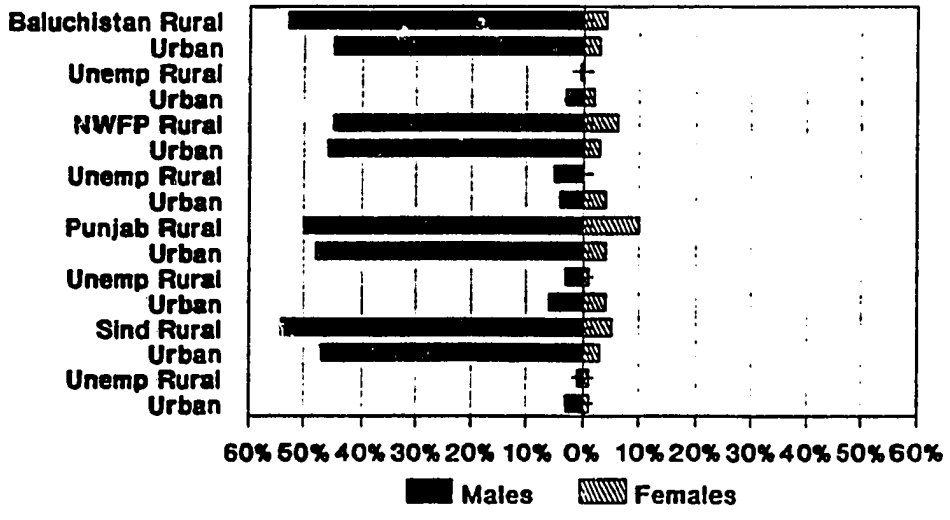
FIGURE 2.36: PAKISTAN
UNEMPLOYMENT RATES BY SEX



	Males	Females
Employed	24.67	3.25
Unemployed	0.9	0.03

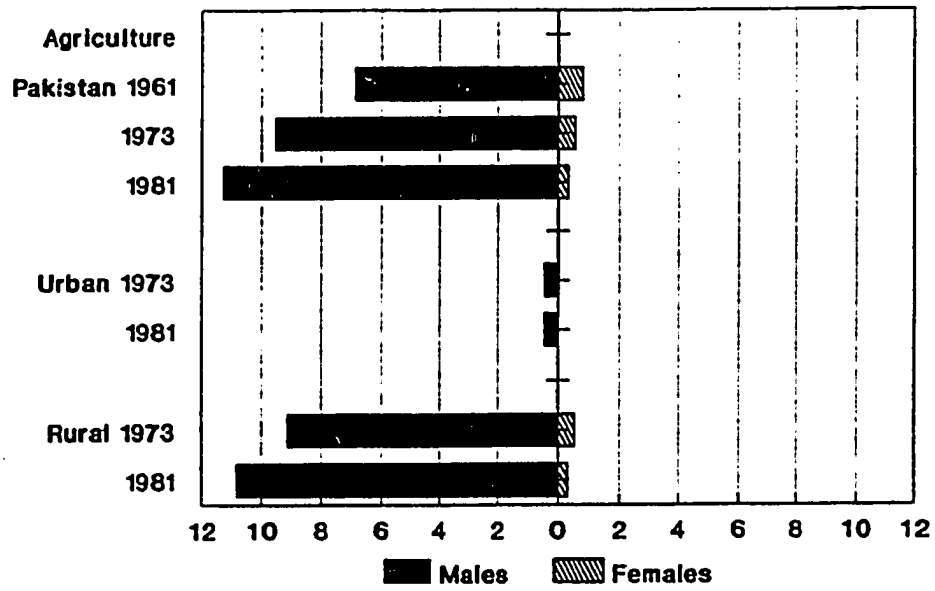
SOURCE: GOVERNMENT OF PAKISTAN, LABOUR FORCE SURVEY, 1987/88.

FIGURE 2.37: PAKISTAN
LABOR FORCE PARTICIPATION RATES BY SEX, PROVINCE, AND RURAL/URBAN LOCATION
(Percent)



SOURCE: GOVERNMENT OF PAKISTAN, LABOUR FORCE SURVEY, 1987/88.

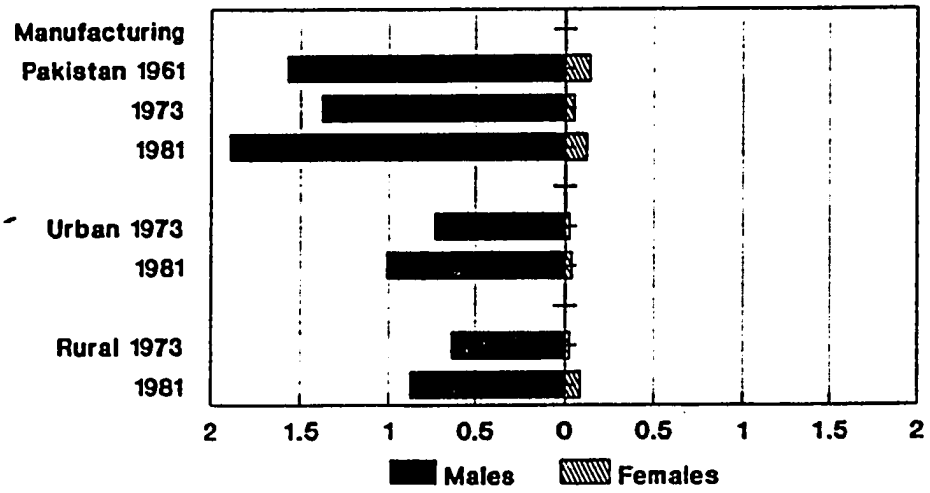
FIGURE 2.38: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX, LOCATION, AND INDUSTRY, SELECTED YEARS



SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, APRIL 1990.

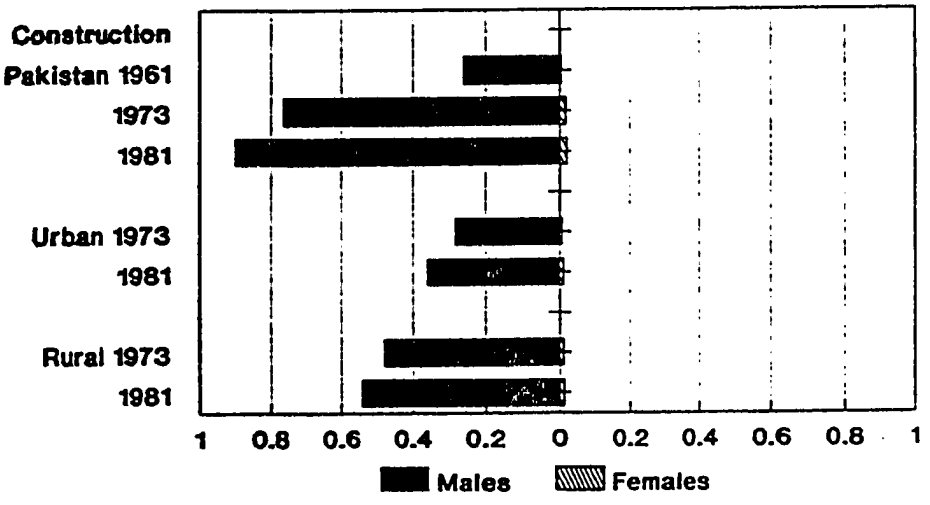
FIGURE 2.39: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX, LOCATION, AND INDUSTRY, SELECTED YEARS

(Millions)



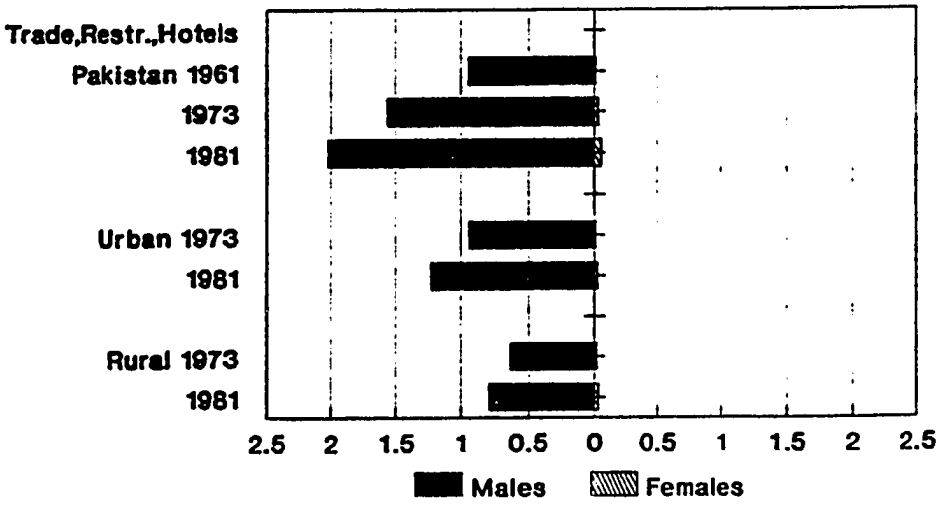
SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, APRIL 1990.

FIGURE 2.40: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX, LOCATION, AND INDUSTRY, SELECTED YEARS
(Millions)



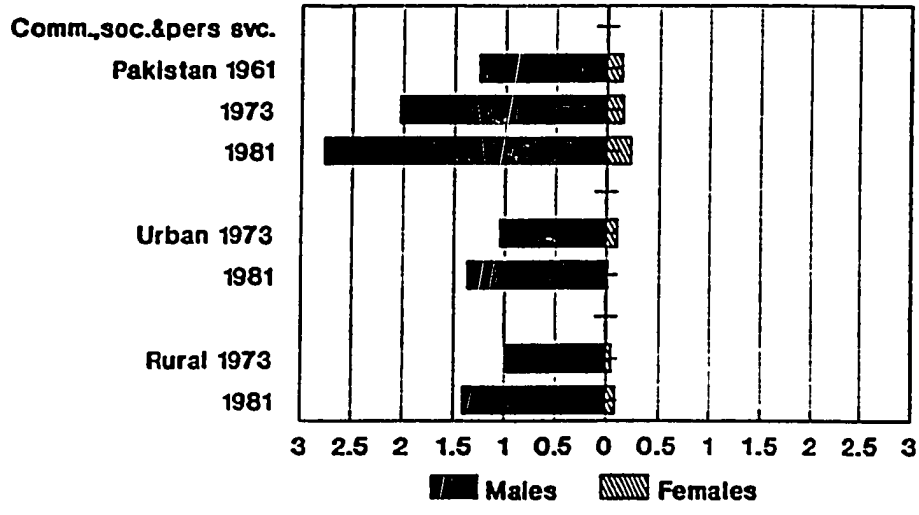
SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, APRIL 1990.

FIGURE 2.41: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX, LOCATION, AND INDUSTRY, SELECTED YEARS
(Millions)



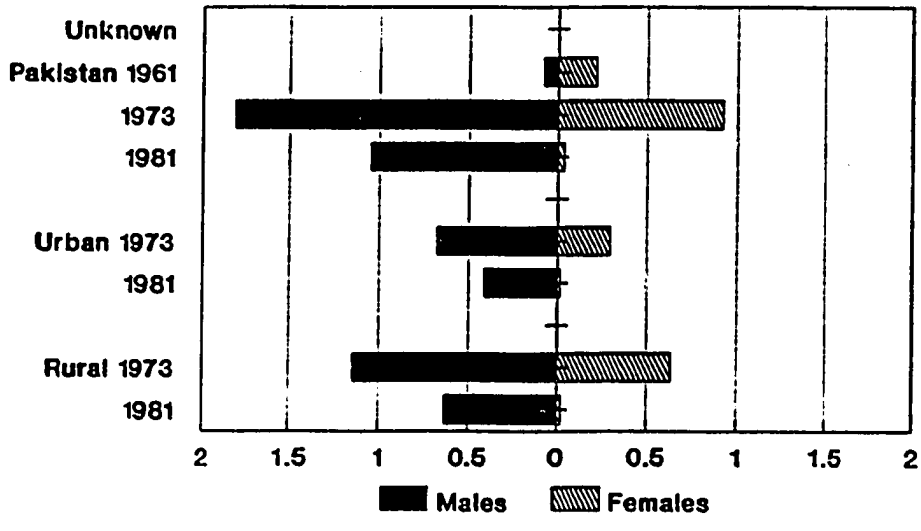
SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, APRIL 1990.

FIGURE 2.42: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX, LOCATION, AND INDUSTRY, SELECTED YEARS
(Millions)



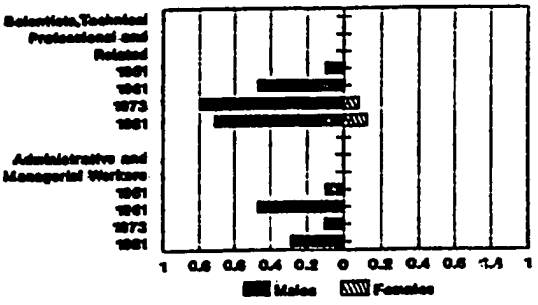
SOURCE: U.S. CENSUS BUREAU,
INTERNATIONAL DATA BASE, APRIL 1990.

FIGURE 2.43: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX, LOCATION, AND INDUSTRY, SELECTED YEARS
(Millions)



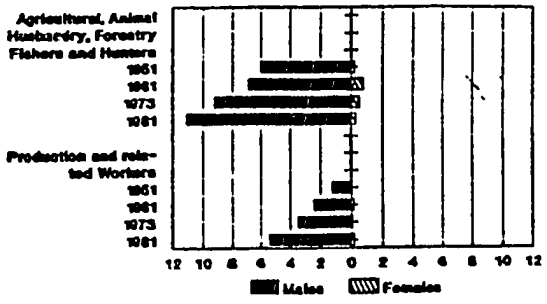
SOURCE: U.S. CENSUS BUREAU,
INTERNATIONAL DATA BASE, APRIL 1990.

FIGURE 2.44: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX AND OCCUPATION, SELECTED YEARS
(Millions)



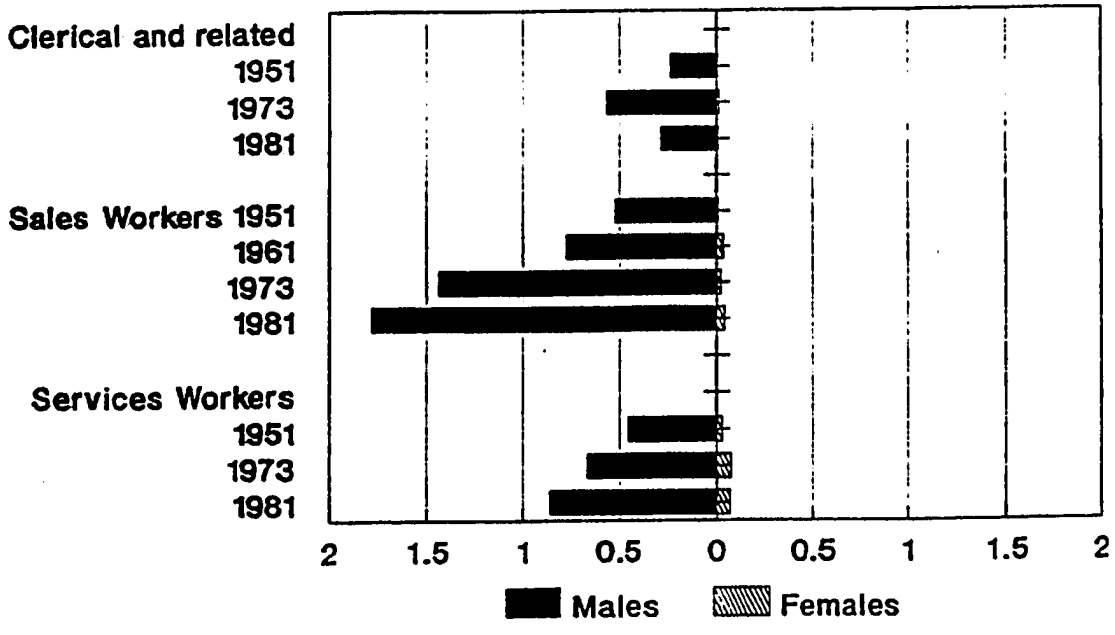
SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, APRIL, 1990.

FIGURE 2.45: PAKISTAN
ECONOMICALLY ACTIVE POPULATION BY SEX AND OCCUPATION, SELECTED YEARS
(Millions)



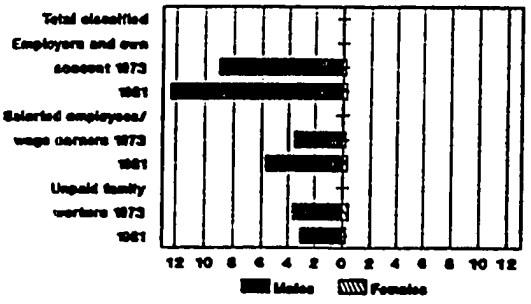
SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, APRIL, 1990.

FIGURE 2.46: PAKISTAN ECONOMICALLY ACTIVE POPULATION BY SEX AND OCCUPATION, SELECTED YEARS (Millions)



SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, APRIL, 1990.

FIGURE 2.47: PAKISTAN
WORKERS BY STATUS AND SEX, 1973 AND 1981
(Millions)

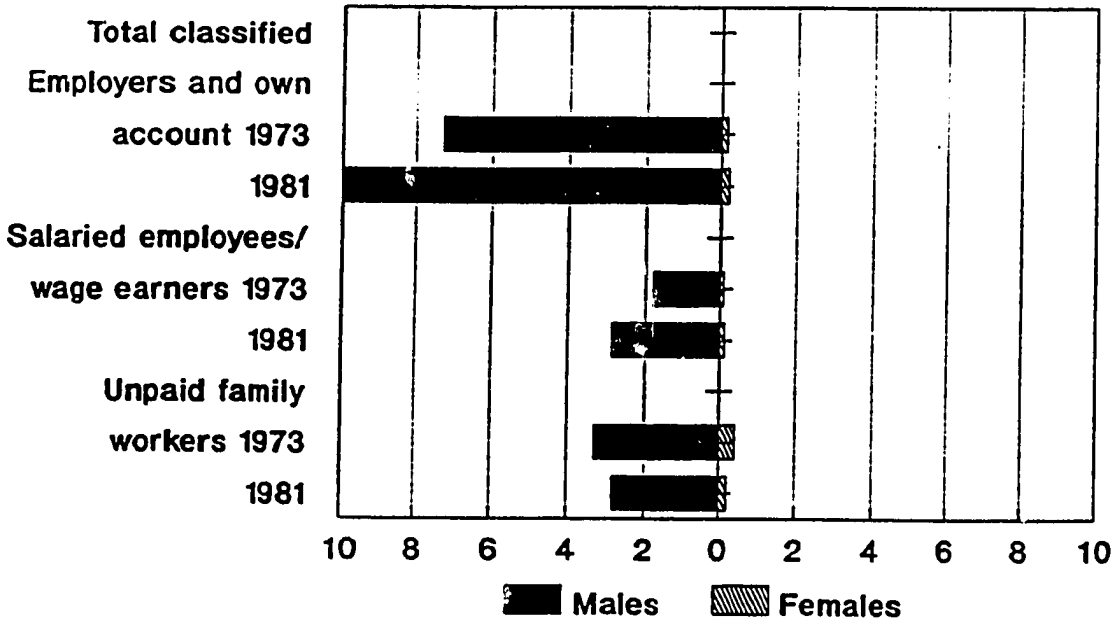


SOURCE: U.S. CENSUS BUREAU,
INTERNATIONAL DATA BASE, JULY 1990.

FIGURE 2.48: PAKISTAN
WORKERS BY STATUS AND SEX (URBAN), 1973 AND 1981
(Millions)

SOURCE: U.S. CENSUS BUREAU,
INTERNATIONAL DATA BASE, JULY 1990.

FIGURE 2.49: PAKISTAN
WORKERS BY STATUS AND SEX (RURAL), 1973 AND 1981
(Millions)



SOURCE: U.S. CENSUS BUREAU,
INTERNATIONAL DATA BASE, JULY 1990.

Among those who are employed in the major industry, occupation, and status groups in 1987-88, agriculture, etc., in the rural sector has the greatest percentage of both males and females (Figure 2.48). In the rural sector, two occupation groups account for almost all female employment: agricultural and related workers and manufacturing and related workers. In the urban sector, approximately one third of economically active females are in professional and technical fields, and one third in production and related activities. Around two fifths of economically active males are in production and related work while one fourth are employed in sales positions (Figure 2.49). A very distinct difference is evident when the distribution of employed persons is examined across status groups where the proportion of males who are classified as self-employed consistently outnumbers the proportion of females thus employed. In the rural sector, the greatest proportion of economically active females are categorized as unpaid family workers while the highest proportion of males are categorized as self-employed. In the urban sector, approximately one half of male and female workers are classified as employees, followed by self-employed and unpaid family workers (Figure 2.50). When viewed across industries, the highest proportion of both economically active females and males in the rural sector is clearly in agriculture (Figure 2.49) (Government of Pakistan, 1989).

E. Women's Activities in the Rural Economy

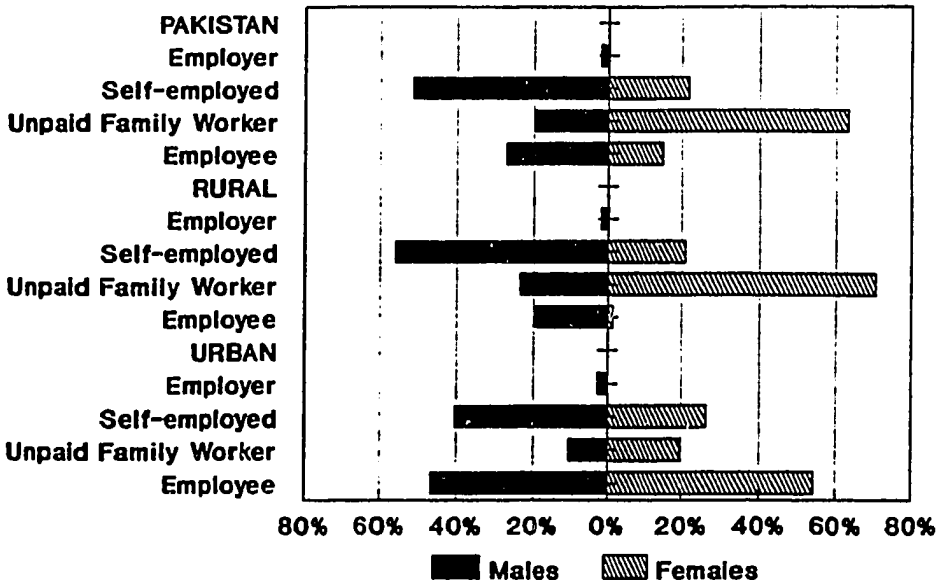
Pakistan was still largely an agricultural country in 1988 although agriculture accounts for a declining share of GDP: 26 percent in 1988 down from over 40 percent in 1960 (Figure 2.51). The growth rate in agriculture more than doubled between 1970-82 and 1980-88--a greater rate of growth than industry (including manufacturing) or services (Figure 2.52). The agricultural sector still employs the largest share of the civilian work force: just under 50 percent in 1986/87. Both agriculture and industry have lost shares of civilian employment while the services sector has gained (Figure 2.53). However, when examined across industrial categories, the work force employed in agriculture is still over three times that employed in any other industry despite a constant declining trend (Figure 2.54).

While agricultural activity is expected to remain an extremely important segment of the economy, it is also anticipated that the proportion of the labor force engaged in agriculture will continue to decline gradually. To meet the food requirements of a rapidly growing and increasingly urban population, the government is trying to augment production by increasing cultivable land, mechanizing farms, improving irrigation systems, undertaking large-scale efforts to control waterlogging and salinity, and introducing multiple cropping techniques. Many of these efforts disproportionately benefit large, more productive farmers, despite the fact that approximately 74 percent of all farms in Pakistan are less than five hectares and cover about 35 percent of the total acreage (IFAD, 1984).

Both men and women work in the rural sector, usually in cooperative activities that are shared between husbands and wives (Mohiuddin, 1989). Among the subsistence farms and poor landless households, women's economic contribution to rural household income is substantial. Their economic activities include cost-saving unpaid family labor and wage-earning casual or itinerant work in both agricultural and non-agricultural employment (IFAD, 1984). Essentially, females perform three prominent roles in agricultural activities:

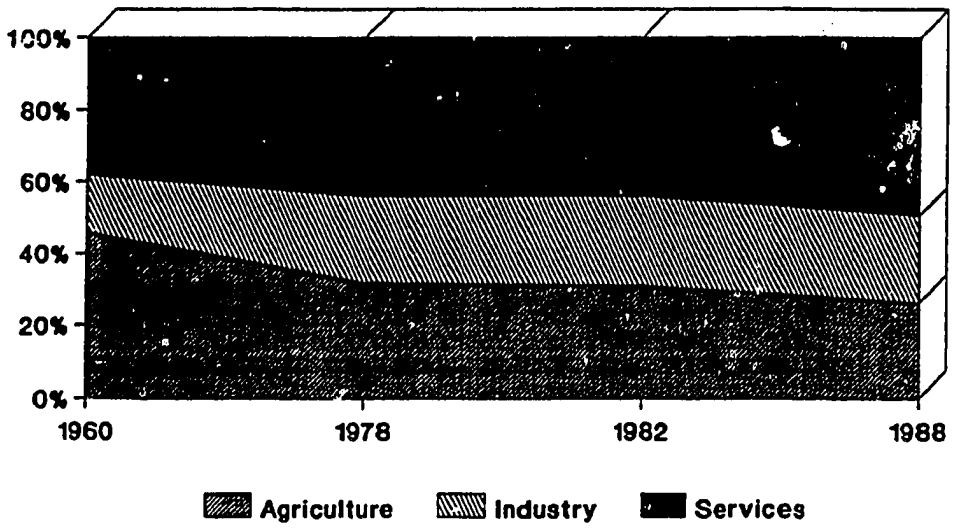
1. They are directly involved in farming operations (e.g., cotton picking, fruit and vegetable harvesting, cleaning and storing farm products, poultry and livestock care).

FIGURE 2.50: PAKISTAN
DISTRIBUTION OF EMPLOYED PERSONS BY SEX, STATUS, AND RURAL/URBAN LOCATION



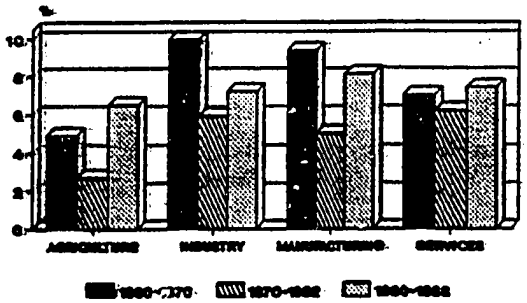
SOURCE: GOVERNMENT OF PAKISTAN, LABOUR FORCE SURVEY, 1987-88.

FIGURE 2.51: PAKISTAN
STRUCTURE OF PRODUCTION, SELECTED YEARS
(Percent Share of GDP)



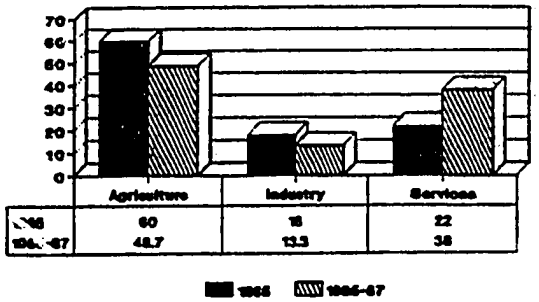
SOURCE: WORLD BANK DEVELOPMENT REPORT, 1980, 1984, 1990.

FIGURE 2.52: PAKISTAN
GDP GROWTH BY SECTOR AND YEAR,
SELECTED PERIODS



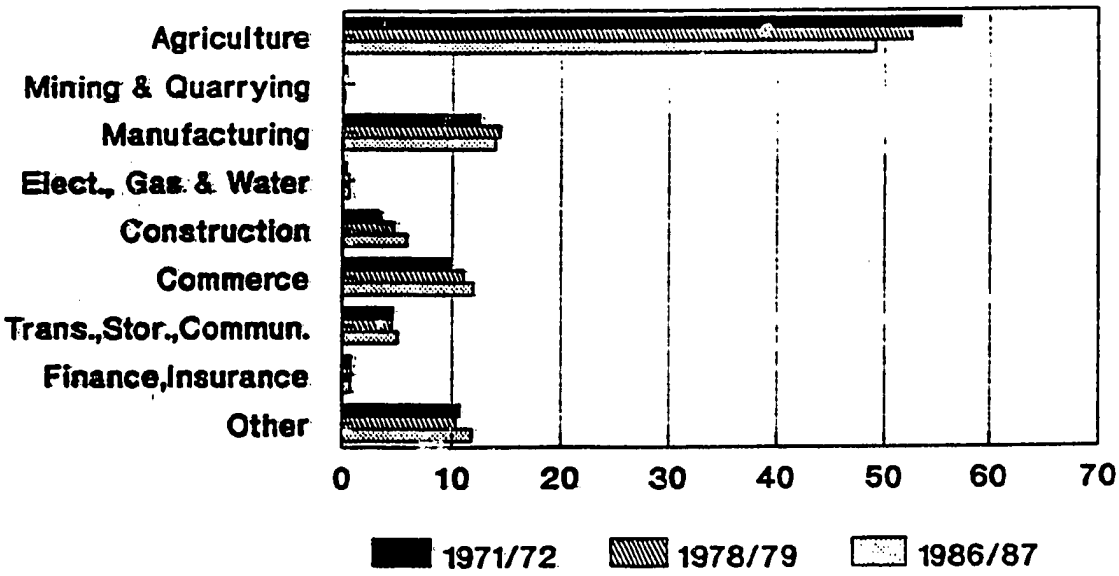
SOURCE: WORLD BANK, WORLD DEVELOPMENT REPORTS, 1989, 1994 and 1995.

FIGURE 2.53: PAKISTAN
SECTORAL SHARE OF THE LABOR FORCE
(Percent)



SOURCE: UNDP, HUMAN DEVELOPMENT REPORT, 1995.

FIGURE 2.54: PAKISTAN
SECTORAL DISTRIBUTION OF THE WORK FORCE, SELECTED YEARS, 1971/72, 1978/79, 1986/87
(Percent)



SOURCE: WORLD BANK, PAKISTAN: EMPLOYMENT ISSUES AND PROSPECTS, APRIL, 1989.

2. They supplement male farm labor in farming operations (e.g., thinning and hoeing crops such as cotton or maize, earthing-up and digging crops such as potatoes or peanuts, line planting wheat, stripping sugarcane and putting the sets in the soil, cutting fodder).

3. They manage and perform household tasks (e.g., preparing and transporting meals to the fields, cutting and collecting firewood, hand-milling flour, grinding nuts and grains, churning milk).

There is a massive underestimation in most official data of women's work in the rural economy. The annual Labour Force Surveys show implausibly low female labor force participation rates of 11.9 percent for rural and urban areas combined in 1986-87; and the 1981 Population Census gave a rural female labor force participation rate of 3.0 percent. The 1980 Agricultural Census, while it is still somewhat biased in favor of men, is perhaps the most comprehensive official source available on women's economic activities in agricultural households, particularly as farm workers. The census covers approximately 6.2 million agricultural households subdivided into farm households (4.2 million) and livestock households (1.99 million). The census does not include landless rural households except insofar as they are reported under livestock holders (World Bank, 1987, 1989). According to the 1980 Agricultural Census, an estimated 73 percent of women and 93 percent of men age ten and above in agricultural households are economically active. Based on these figures, the World Bank (1987) estimates that in 1984/85 over 12 million females participating in agricultural activities may have been omitted from official statistics. The Census reports that women work primarily as unpaid family workers. Approximately 54 percent of all females over ten years of age in agricultural households work in agricultural activities on their own farms while 16 percent work in non-agricultural activities within their own households. Only about 3 percent of economically active women were reported to work in other households.

Activity rates vary among provinces, being highest in Sind (64 percent), followed by Punjab (55 percent), NWFP (44 percent), and Baluchistan (30 percent) (Table 2.1) (IFAD, 1984; Mohiuddin, 1989; World Bank, 1987, 1989). These regional variations can be attributed to both the differences in the agro-climatic zones that determine the overall level of agricultural activity (e.g., NWFP and Baluchistan have less overall agricultural activity than Punjab or Sind) and differences in income levels (e.g., Sind has lower per capita income levels than Punjab, placing greater demands on women to work). Women's participation is also higher in barani (rain-fed) areas compared to irrigated areas. In barani areas, men often seek work outside the household and migrate to another location, leaving women to manage the farm. Employment of casual female labor is more likely in irrigated areas. Cotton-growing zones tend to have more female activity in production than rice zones (Mohiuddin, 1989).

Females constitute about 43 percent of all agricultural workers on their own household's land holdings. The majority (62 percent) are engaged on a part-time basis. They constitute 25 percent of all full-time workers and 76 percent of all part-time workers. In contrast to females who work in other households where agricultural activities predominate over non-agricultural activities (Table 2.2), the majority of females working in their own holdings are principally engaged in non-agricultural activities (Table 2.3). Among farm households below three hectares and livestock holders, approximately 39 percent of women work full time and 77 percent work part time. The proportion of family labor that is female on these farms is 40 percent and 60 percent among livestock holders. These figures vary across provinces (Table 2.4). Micro studies provide a closer look at the distribution of activities and time allocation of women participating in agricultural and non-agricultural activities. In a study of four villages of the Lyallpur District, for example, although participation rates in farm and domestic activities

TABLE 2.1: PAKISTAN

FEMALE PARTICIPATION RATES IN AGE GROUP 10 YEARS AND ABOVE IN FAMILY LABOR OF AGRICULTURAL HOUSEHOLDS

	Female Population Of Agricultural Households (10 Years and Above)	Female Participation Rates Of Agricultural Households As Family Workers	%
Pakistan	12,906,735	7,017,893	54
Sind	2,050,444	1,310,939	64
NWFP	1,502,492	659,556	44
Punjab	8,810,332	4,883,866	55
Baluchistan	543,463	163,539	30

SOURCE: IFAD, 1984, "AGRICULTURAL POLICY AND RURAL POVERTY IN PAKISTAN."

TABLE 2.2: PAKISTAN

PERCENTAGE FEMALE OF ALL FAMILY MEMBERS OF AGRICULTURAL HOUSEHOLDS ENGAGED IN WORK OF OTHER HOUSEHOLDS

	Mainly Agriculture	Mainly Non-Agriculture
Pakistan		
Agricultural households	16	12
Livestock holders	15	11
Farm households	21	9
Farm households below 3 ha.	20	9
Sind		
Agricultural households	24	8
Livestock holders	23	8
Farm households	25	9
Farm households below 3 ha.	25	9
NWFP		
Agricultural households	8	6
Livestock holders	5	6
Farm households	14	6
Farm households below 3 ha.	14	6
Punjab		
Agricultural households	15	11
Livestock holders	14	11
Farm households	21	10
Farm households below 3 ha.	20	10
Baluchistan		
Agricultural households	20	11
Livestock holders	20	11
Farm households	20	11
Farm households below 3 ha.	20	11

SOURCE: IFAD, 1984, "AGRICULTURAL POLICY AND RURAL POVERTY IN PAKISTAN."

TABLE 2.3: PAKISTAN

FAMILY LABOR 10 YEARS AND ABOVE ENGAGED IN AGRICULTURAL WORK ON THEIR OWN HOLDINGS

	Pakistan	Baluchistan	NWFP	Sind	Punjab
All Workers	16,465,251	579,825	1,713,741	3,071,302	11,100.391
Male	416,286	416,286	1,054,185	1,780,363	8,216,525
Female	164,539	163,539	649,558	1,310,939	4,883,866
% female workers	42.5%	28%	38.5%	43%	44%
% female of total full-time workers	25%	24%	25%	33%	21%
% female full-time	38%	68%	48%	64%	29%
female total part-time workers	76%	43%	63%	79%	78%
% female family workers	82%	32%	52%	36%	71%
Mainly Agricultural % female of total	42%	28%	39%	43%	44%
Non-Agricultural % female of total	69%	64%	75%	74%	65%

SOURCE: IFAD, 1984, "AGRICULTURAL POLICY AND RURAL POVERTY IN PAKISTAN."

TABLE 2.4: PAKISTAN

PERCENTAGE FEMALES WORKING AND PERCENTAGE FEMALES OF ALL FAMILY LABOR

	% Females Working In Agricultural Households Below 3 ha.		% Females Of All Family Labor	
	Full time	Part time	On farm house-holds below 3 ha.	Among live-stock holders
Pakistan	39	77	40	60
Sind	35	84	41	56
NWFP	27	63	35	56
Punjab	21	80	40	62
Baluchistan	23	37	36	23

SOURCE: IFAD, 1984, "AGRICULTURAL POLICY AND RURAL POVERTY IN PAKISTAN."

vary somewhat across castes, their participation is still high (Table 2.5). In the same district, a separate study shows that the daily activities of women totalled over 15 hours (Table 2.6). During the harvest season, the demand on women's time increases accordingly.

1. Crop Production

Women participate extensively in all operations involved in crop production, but some activities are more female-labor-intensive than others. Men generally take responsibility for the earlier phases in the production cycle, like field preparation, while women assume progressively more responsibility in the operations that follow. Some of these are harvest and pre-harvest tasks usually done in the field (like weeding, transplanting rice, picking cotton, stripping leaves from canes for fodder), while others are post-harvest tasks done in or near the home (like threshing, winnowing, drying, and storage). The field tasks dominate for rice and cotton, and the home tasks for wheat and sugarcane. Most female participation in the crop-production process falls into the latter categories of food storage and processing (Mohiuddin, 1989; World Bank, 1989).

Of the 22 operations identified in one study as crucial components of the crop-production cycle for the main barani crops, 50 to 90 percent of the women interviewed claimed to take primary responsibility for performing five of those operations--preparing seeds, collecting farmyard manure, drying and processing, preparing storage, and storing food for home (Table 2.7). Other studies show that more than 90 percent of the women report cleaning and storing grains. They build and maintain storage bins (made of mud-plaster). They place a solution of mercury and oil in the grain to kill insects--a potentially dangerous practice. A recent study of seven villages in seven tehsils near Faisalabad show that 49 percent of the sampled women participated in the production and management of grain crops. Eighty percent of the women participated in the repair and maintenance of grain storage, 50 percent in construction of grain storage, more than 30 percent in weeding, harvesting and winnowing, more than 20 percent in sowing, transporting and threshing, and less than 10 percent in irrigation (World Bank, 1989).

A recent survey conducted by the Barani Agricultural Research and Development (BARD) Project in five districts of NWFP shows that 82 percent of women participated in agricultural work. They spend 45 percent of their time on agricultural work and are responsible for 25 percent of the production of major crops and 30 percent of food (Shah et al., 1986).

On the whole, it appears that women bear the major responsibility for the following crops:

- fodder crops, whether maize or rapeseed as in barani areas, sugarcane stalks, or mung pulses (pre-harvest, harvest and post-harvest work);

- vegetables and fruits like chilies, onions, and melons (weeding, sowing seeds, digging root vegetables, picking and so on);

- cotton (weeding and entire picking);

TABLE 2.5: PAKISTAN

PERCENTAGE OF WOMEN PARTICIPATING IN FARM AND DOMESTIC ACTIVITIES BY CASTE IN FOUR VILLAGES OF THE LYALLPUR DISTRICT

	Rajput	Jat	Arian	Gujar	Baluch
Sowing season					
Hoeing	-	6	46	3	4
Harvesting season					
Wheat cutting	40	20	42	31	65
Wheat threshing	40	51	53	86	84
Cotton picking	40	40	64	33	27
Sugarcane processing	20	14	27	76	24
Fodder cutting	60	80	74	80	78
Cleaning grains	78	95	68	91	95
Animal care					
Milking animals	91	88	92	91	74
Cleaning shed	52	82	89	88	81
Other activities					
Preparation of farm meals	39	95	88	76	95
Off-farm work	96	88	88	76	78

SOURCE: KLAHWAR SAEED, IN HALBOCK (1975).

TABLE 2.6: PAKISTAN

HOURS SPENT ON DAILY DOMESTIC ACTIVITIES BY WOMEN IN A MUSLIM VILLAGE NEAR LYALLPUR

Activity	Hours/ Minute	Percentage Of Working Time
Collecting, carrying, and preparing fodder for animals	3:45	24
Animal care	1:45	11
Milking and churning	1:00	7
Cooking	1:45	11
Carrying food to the fields, and feeding children	1:30	10
House cleaning, and making dung cakes for fuel	:45	5
Carrying water	:30	3
Child care	:30	3
Other domestic chores (includes food processing, crafts)	3:00	19
Afternoon rest	1:00	7
Total working hours	15:30	-

SOURCES: ANWAR AND BILQUEES (1976); WORLD BANK (1989).

TABLE 2.7: PAKISTAN

DIVISION OF LABOR WITHIN HOUSEHOLDS FOR MAJOR CROP PRODUCTION ACTIVITIES

Percentage of Females Responding to: Who Performs the Operation

Operations	Type of Labor				
	Male Family	Female Family	Hired Male	Hired Female	Exchange
Seed preparation	6.0	93.5	-	-	0.5
Tilling	76.6	0.1	23.3	-	-
Sowing	80.2	1.0	18.0	0.2	0.5
Planking	85.8	0.1	13.5	-	0.5
Sealing	86.4	0.3	12.8	0.13	0.4
Collecting farm yard manure	9.7	88.9	1.4	-	-
Applying farm yard manure	58.2	38.7	2.8	-	0.4
Spreading chemical fertilizer	96.5	0.6	2.4	-	0.6
Taking off fodder	49.0	50.0	0.5	-	0.5
Weeding	47.8	46.9	3.4	-	2.0
Harvesting	53.9	32.5	4.4	2.2	7.0
Binding (wheat)	67.1	20.1	3.8	0.4	8.6
Husking (maize)	55.4	30.4	5.9	3.6	4.5
Preparing threshing floor	88.1	9.0	1.9	-	1.1
Threshing	50.1	23.5	22.2	0.4	3.9
Drying	45.4	51.5	2.5	-	0.5
Off-farm transport	93.4	5.2	1.0	-	1.3
Selling produce to agent	98.1	1.9	-	-	0.4
Preparing storage	26.7	73.0	0.3	-	-
Storing food for home	32.5	66.2	1.0	0.2	-
Storing fodder	76.1	19.9	2.5	-	1.5

SOURCES: FREEDMAN AND WAI, GENDER AND DEVELOPMENT IN BARANI AREAS OF PAKISTAN; WORLD BANK, 1989.

- rice (transplanting, weeding, threshing, winnowing); and

- pulses (winnowing and preserving).

2. Livestock Production

Livestock production is largely the job of women, who are the custodians of knowledge about livestock production practices. It has been estimated that between 20 and 33 percent of the average woman's day is devoted to livestock-related operations. Almost all women in livestock-owning households (whether livestock or farm households) contribute in some way to maintaining animals and processing animal products for use in crop production or for sale in markets. A recent survey of barani (rainfed) areas in Punjab and NWFP, for example, found that of 14 livestock production operations covering a broad range of activities, women have primary responsibility for at least 8 and are very active in others. In some, women have nearly exclusive responsibility, such as in cleaning sheds and collecting manure for fuel or organic fertilizer, as well as in making ghee and selling products to villagers. Women also take major responsibility for other such tasks as cutting and fetching fodder, cleaning animals, and milking. In yet others, such as grazing and watering animals, they share responsibility with men. But of eight livestock-related operations in crop production, men have major responsibility for at least four, including draft power (tilling, ploughing, preparing the threshing floor and transport). They share the responsibility with women for two tasks--applying farmyard manure and threshing--and women have major responsibility for the other two--fetching fodder and collecting farmyard manure (Table 2.8).

Livestock production is the most important income-generating activity for a woman in an agricultural household. A sample survey of barani areas found that returns from the sale of animal products by women constitute on average 13 percent of total household income. The sale of crops by men was the third highest source of their income after remittances and off-farm wages.

3. Non-Agricultural Activities

The 1980 Agricultural Census sheds some light on female labor input in non-agricultural activities, at least for agricultural households. Sixteen percent of adult women in agricultural households do non-agricultural work either in their homes or in other households for payment. They contribute 69 percent of total labor in such own-household work and 10 percent to such work in other households for payment (World Bank, 1989). This activity rate is an underestimate, because the Census does not have data on non-agricultural households. These might be households of agricultural workers who neither own nor rent land, or of rural non-farm workers whose occupation is the same as their caste (potters, leather workers, weavers, fishermen, and women construction workers, etc.) The Agricultural Census contains no gender-disaggregated data on non-farm, non-agricultural activities, but it is estimated that about 33 percent of rural females older than 10 years of age belong to such non-agricultural households. They are engaged mainly in such crafts as embroidery, tailoring, crocheting, carpet and duree weaving, handloom production, leather work, pottery and ceramics, as well as construction, food-processing, and miscellaneous handicrafts (World Bank, 1987, 1989).

The time women spend in these tasks is considerable. Two micro level studies show the hours of work of female handicraft workers in Sind. The 216 women surveyed in middle, north, and south Sind spent an average of 4.4 hours a day at handicrafts with 40 percent working more than five hours, 14 percent more than seven hours, and 4 percent more than nine hours a day, in addition to household chores (World Bank, 1989).

TABLE 2.8: PAKISTAN

DIVISION OF LABOR WITHIN HOUSEHOLDS FOR MAJOR LIVESTOCK OPERATIONS

Percentage of Females Responding to: Who Performs the Operation

Operations	Type of Labor				
	Male Family	Female Family	Hired Male	Hired Female	Exchange
Building and maintaining sheds	17.1	1.3	81.1	0.4	-
Cleaning sheds	8.4	90.7	0.8	-	-
Cleaning animals	49.1	50.0	0.9	-	-
Grazing animals	87.0	11.2	1.8	-	-
Watering	55.4	43.8	0.8	-	-
Bringing fodder	46.7	52.5	0.8	-	-
Milking	32.2	67.4	0.4	-	-
Preparing ghee	-	100.0	-	-	-
Egg collection	13.0	87.0	-	-	-
Manure collection	6.2	92.9	0.9	-	-
Care of birthing animals	52.4	47.2	0.4	-	-
Care of sick animals	75.5	24.0	0.4	-	-
Selling produce to agents	86.7	12.7	0.6	-	-
Selling produce to villagers	5.9	94.1	-	-	-

SOURCES: FREEDMAN AND WAI, GENDER AND DEVELOPMENT IN BARANI AREAS OF PAKISTAN; WORLD BANK, 1989.

The contribution of the handicraft workers to household income was not marginal, as is sometimes believed, but substantial--22 percent on average, and as high as 46 percent in certain poor areas. Moreover, 21 percent of the handicraft workers--either individually or jointly with other female family members--were the sole or primary earners in their families and thus heads of the household in terms of economic responsibility. These include single women who were earning to support their parents and siblings because of the death/desertion/sickness of father, absence of elder brother, or poverty in general; divorced or widowed women; and married women whose husbands were too sick, old, or unwilling to work. The study found that these women worked longer, with 33 percent working 7-10 hours a day at handicrafts, compared to 8 percent of the other handicraft workers. As expected, women in the female-headed households were poorer, with 52 percent below the poverty line compared to 37 percent of women in other households.

In addition to income and working hours, there are other more subtle indices of economic status, such as degree of control over earnings. Mohiuddin found that 42 percent of the female handicraft workers collected money from such work themselves, and 64 percent of those had full or partial control over their money. These women spent, on average, 24 percent of their incomes on their households, 33 percent on purchases of raw materials, 14 percent on miscellaneous items, and saved the remaining 29 percent.

In general, in the rural economy, women's economic contribution in the production and distribution of goods and services is concentrated in the agricultural sector and generally takes the form of unpaid family workers producing for household consumption and occasionally for exchange. A large proportion of rural women work in both agricultural and non-agricultural activities on small, subsistence-based farms of less than three hectares. These small farms are characterized by a high degree of integration between farm production that depends almost exclusively on family labor and other, domestic economic activities, principally performed by women, that transform produce or raw materials into goods that can be consumed or used. The production of the household's means to survive is the major objective of such subsistence farming.

As the agrarian system becomes more monetized, the integration of these activities erodes and wage labor becomes an important means to secure family survival. Wages in the undeveloped rural economy are seldom sufficient to meet family subsistence needs, and must be supplemented by the domestic economic activities of women's subsistence production as a source of in-kind household income. As economic circumstances demand, women also take on wage and informal production work.

Women from both small farms and landless households are hired principally on a part-time or seasonal basis for sowing, weeding, winnowing, transplanting, picking, cutting and threshing, as well as rice-husking, corn hulling, making gur from sugarcane, and grinding grain. Payments are often made in kind rather than cash. Women (and children) are the principal suppliers of labor for livestock care (e.g., grazing, collecting crop residue for fodder, feeding and milking the animals, making dairy products). It is reported that activities related to livestock care are 60 percent dependent on the use of hired labor in Punjab, and milk production accounts for 13 to 28 percent of rural farm incomes (IFAD, 1986).

Beyond the various phases of food production, women also preserve, prepare, and distribute goods and provide services within the family. Women also contribute labor to the construction of family dwellings. In many areas, women have the principal responsibility for collecting mud and repairing their dwellings. In addition, women engage in artisanal production, making cooking utensils, straw mats, storage containers, clothing, rugs, etc., generally for domestic use but also for barter and sale to local merchants and middlemen. As the economy becomes more cash-dependent, pressure may build to increase these informal income-generating

activities (IFAD, 1986). Women also have the primary responsibility for fetching water for the family and livestock, and collecting fuelwood, often from great distances. Surveys have shown that women's combined activities typically take 12 to 15 hours a day, an amount significantly greater than men spend on productive work (World Bank, 1989).

The productivity of women's labor in the rural economy is constrained by several factors. 1) Although their household labor represents an important source of in-kind household income, it is time-consuming and arduous and generally performed with primitive technologies that significantly lower productivity. 2) Women's lack of access to agricultural extension, credit, production technology, input supplies, and marketing knowledge locks them into highly labor-intensive, seasonal and low-productivity activities. (3) Cultural practices restricting women's activities outside the household inhibit them from allocating their labor to higher productivity tasks.

Together with these direct constraints to women's labor productivity, it is important to add the sheer limitation on women's physical capacity and time. Women engaged in economic activities (agricultural and non-agricultural, farm or household production) and women engaged in biological and social reproductive activities (constant pregnancy, childbearing, lactation, and caring for the young, the old, and the ill) are not two distinct groups. In general, in poor populations, women are simultaneously responsible for both sets of activities. In the case of Pakistan, although both women and men share the farm production and income-generating tasks, the care of children and the household falls exclusively to women. For the most part, in fact, men are culturally constrained from sharing in such "women's" work. As women's health status is already at high risk in the rural sectors, the enormous weight of their dual burden further jeopardizes their health, further reduces their productivity, and negatively affects overall family welfare and survival.

F. Women's Activities in the Urban Economy

Data on female labor force in Pakistan in the urban sector in particular are deficient, both quantitatively and qualitatively. The official statistics--mainly the Labour Force Survey and Population Census--are the only data that permit analysis of the labor force characteristics and trends at the national level, but they suffer from serious definition and measurement problems. Specialized studies exist, but are usually too limited in coverage to be representative. Unfortunately, there is no equivalent of the Agricultural Census--which gives at least a general picture of women's participation in the rural economy--for assessing women's contribution to the urban economy. Official labor force statistics, which range from a female labor force participation rate of 3.5 percent in the 1981 Population Census to 11.9 percent in the 1986-87 Labour Force Survey (for urban and rural), are implausibly low. This is because, although their categories are somewhat unclear and inconsistent, these surveys tend to cover women in the formal sector only, whereas most urban working women are found in the informal sector (World Bank, 1989). Evidence from micro-level surveys, combined with deductions from the official statistics and more informal research and analysis, suggests a conservative estimate of about 20-30 percent of the female urban population working, in the formal and the informal sectors combined. This is based on full-time equivalents but would represent a greater number of part-time workers. Altogether, it is likely that the total female work force in the urban sector (formal plus informal) is just about 2.5 million women (full-time equivalents) including about 2 million in the informal sector (World Bank, 1989).

Women in the urban economy work in a range of occupations in a continuum between the two extremes of fully formal and fully informal. They range from those in the formal sector (factory workers, teachers, doctors); to those working in the informal sector, but who are linked with the formal sector (e.g., piece-rate workers working at home on contract for a factory); to those fully in the informal sector. These latter are either

home-based, being self-employed or in family enterprises (e.g., seamstresses, leather workers, launderers, and vendors) or they are "outside-home" wage workers (e.g., brickmakers, construction workers, domestics) (World Bank, 1987, 1989).

Compared to rural women, urban workers generally need to spend less time and energy in fulfilling the basic requirements for survival (i.e., providing food, water, and fuelwood). Services such as schools and hospitals are more readily available in urban areas due to the extreme urban bias in the education and health sectors. Thus, urban women potentially have more time for productive activities. A greater dependence on wage income in the urban setting creates additional pressure on women to engage in income-earning activities. On the other hand, requirements of purdah are more likely to confine urban women to the home than their rural counterparts. And where they do work outside the home, the scarcity of socially acceptable occupations and work conditions severely limits their employment opportunities. Childcare and other responsibilities are also more likely to keep urban women at home, since the extended family system tends to break down in urban areas and leave women to care for the family on their own.

The labor market in Pakistan is highly segmented, particularly in urban areas, because of the high degree of segregation. This incurs economic costs, because labor cannot be allocated in the most efficient way. Women are crowded into low-productivity activities, and fewer women work than would if the returns were higher. This segmentation also has high equity costs, because the poorer the family, the more likely they are to depend, wholly or in part, on women's earnings. The Population Census shows a significant decline in the female labor force participation rate (flfpr) since 1951: the flfpr reported in the 1981 Census is the lowest observed in the history of the census in Pakistan. Even the absolute size of the female labor force in the 1981 Census is smaller than that estimated in the 1961 Census, although the population doubled during the period from 1961 to 1981.

The World Bank (1989) estimates an urban female labor force participation rate of 25 percent, an estimate that is confirmed by micro-level studies. Taking 25 percent as the midpoint, it is likely that the "omitted" working population which would be in the informal labor sector would be about 20 percent of the urban female working-age population (or 1.91 million). While the Labour Force Survey estimates, in theory, cover the informal sector (it should include unpaid family labor and work for payments in kind), it is reasonable to assume that, because of the way the data are collected, the majority of those women counted in the labor force would be in the formal sector. This is because paid work of reasonable status performed by women outside the house is the only work to which most male respondents (replying to male enumerators about female relatives' work) are likely to admit. But a few women counted by the labor force surveys are likely to be in the informal sector; therefore, an estimate of 1.91 million "omitted" female workers in the informal sector could be rounded up to about 2 million total female workers in the informal sector (World Bank, 1987, 1989).

1. Formal Labor Force Participation

The official estimate of the female labor force in the urban areas is about .44 million (or a female labor force participation rate of 4.7 percent). Most, but not all, of these women are in the formal sector. Within the formal sector, women are concentrated in a few industry and occupation groups. According to the 1987-88 Labour Force Survey (LFS), the highest percentage of the female urban work force in the formal sector (by economic activity) is in the community, personal, and social service sector (51 percent), followed by the manufacturing (30 percent), trade, restaurants, and hotels (8 percent) and agriculture (7 percent) sectors--the three together accounting for 96 percent of all such women. Similar a classification by occupation groups shows that the highest percentage of the urban formal sector work force consists of production workers (33

percent), followed by professional workers (31 percent), and service workers (17 percent)--the three together accounting for 81 percent of female urban employment. Within the industrial sector, the highest percentage of employed women consists of spinners, weavers, knitters, dyers, and related workers (32 percent). The next highest percentage is of laborers (21 percent); tailors/dressmakers, upholsterers and related workers (17 percent); bricklayers, carpenters and other construction workers (11 percent); transport equipment operators (4 percent); potters and related workers (3 percent).

Barriers to entry in formal sector employment are much greater for women than men. On the supply side, women's lower education and skill levels limit their employment opportunities, the conditions in the workplace may not be conducive to women working because segregation norms may not be maintained, and there may not be separate sanitation facilities. While labor laws in Pakistan make special provisions for women workers who are hired on a permanent basis (more than six months) relating to maternity leave, creches, working hours, etc., these provisions in fact seem to discourage employers, etc., from hiring women as permanent workers due to the added expense these provisions imply. As a result, where women are hired at all, there is a widespread practice of hiring them on a temporary basis, which deprives them of work-related benefits, ensures that remuneration will be low, and diminishes any opportunity for them to raise their productivity through on-the-job experience (Shah et al., 1986; World Bank, 1987, 1989).

The concentration of women in occupations as production workers, service workers, and professional workers is less influenced by wages than by the respectability of the work situation. Women are concentrated in occupations that limit the chances for contact with males outside their family group. Approximately one third of female production workers are in textile and related industries where they work in segregated female departments such as spinning. Service workers generally work while males are out of the house and deal primarily with women of the household, thus safeguarding their need for segregation. Professional workers, the majority of whom are teachers in girls' schools, work in very segregated environments. The taboos placed on women constrain them from performing certain jobs and consign them to a few "female jobs" despite their level of education or skill-acquisition. Interestingly enough, this segregation into "female jobs" has led to Pakistani women being over-represented among the highly paid category of professional workers. To date, the occupational concentration of women in certain jobs has not taken the form of overcrowding and wage discrimination in these high paid occupations because there are so few women in the labor force to begin with. Unskilled low-status occupations are notoriously low paid for both men and women. Nevertheless, women are generally paid less than men for the same work or are restricted to the lowest skill, least desirable tasks and lowest paid tasks (Government of Pakistan, 1989; Mohiuddin, 1989; Shah et al., 1986; World Bank, 1987, 1989).

Women's supply of labor, in general, and their supply of labor in less favored occupations, in particular, is less wage-elastic than that of men. Mohiuddin (1980) points out that women will only enter such occupations when the net economic gain from these occupations outweighs the psychological cost associated with deviating from a widely accepted norm and with the losses suffered in social standing and respect. Moreover, labor supply decisions are often made for women by their families despite the women's own preferences.

a. Professional Workers

A majority of all female professional workers in Pakistan are teachers at various levels or nurses and midwives (including dais--traditional midwives). Approximately 60 percent of all female professionals are teachers (Shah et al., 1986). Because of cultural norms segregating males and females, if increases are to be made in educating girls in keeping with the seventh five-year plan, concurrent increases must be made in

training female teachers. In fact, the shortage of female teachers is perhaps the most important constraint to raising enrollments at the primary level, especially in the rural areas (World Bank, 1989). The low level of female education, in general, contributes to the shortages of female teachers. Shortages are particularly severe for female rural teachers where an estimated 45 percent of positions for female teachers remains vacant or are filled by unqualified teachers (World Bank, 1986). All the incentives, both social and monetary, encourage women to work in urban areas if at all. Social disapproval constrains women from working away from their home areas. Proper transportation and housing is often difficult and costly to arrange. Teachers in rural areas receive lower housing allowances than those in urban areas.

Notwithstanding these constraints, planned increases in girls' education should open up significant urban female employment opportunities in this respectable occupation. The problem of the limited supply of qualified teachers should be counteracted over the long run by increased levels of educational attainment among women if the government is able to increase investment in education as targeted in the seventh five-year plan.

Approximately 3 percent of females working in professions are doctors, surgeons, or technical assistants, and about 12 percent are nurses, midwives, etc. (Shah et al., 1986). Serious imbalances exist between manpower needs and supply in Pakistan's health sector. There is an excess supply of doctors--although most of them are male--and shortages of medical technicians, nurses, and paramedical staff--many of whom are female. There are more than three times as many doctors as there are nurses in Pakistan. Although the statistics do not break down the number of doctors by sex, the seventh five-year plan points out the need to train more female health staff. Under the plan, approximately 10,000 paramedical staff (male and female) and 4,000 nurses (primarily female) are to be trained by 1993.

A major constraint to women's entry into medical fields is their limited access to education at all levels. Between 1980-81 and 1986-87, females enrolled in professional medical colleges did increase slightly from 27 percent to 30 percent of the total number of students enrolled. However, the number of female medical professionals required to serve a female population that is constrained from being seen by male medical professionals remains enormous. As with education, the segregated nature of Pakistani society should result in greater demand for female medical professionals if targeted improvements in health are to be met. The challenge will be ensuring that females have sufficient opportunities to obtain the necessary training.

b. Unskilled Wage Workers: Manufacturing and Construction

Manufacturing: Female unskilled wage workers constitute less than 8 percent of manufacturing employment and about 30 percent of all urban female employment (Government of Pakistan, 1988) and are employed primarily in textile and related industries. Many female workers are employed through subcontracting and "putting out" arrangements with industries (of such items as garments) to workshops (and to home-based workers). This practice is widespread in Pakistan, not only because of technological complementarities in production but also because it allows formal sector firms effectively to avoid labor legislation. Although the number of home piece-work producers is not known, such production is often the only acceptable income-generating opportunity for women who must care for large families or whose families disapprove of outside work. Because many such workers are in the informal sector, their situation will be treated in greater detail below.

The garment industry frequently uses workshops that employ poor and lower middle class young women. Most of these women are wage employees, but some also work on a piece-rate basis. The growth of these

workshops has been phenomenal in the past few years. Operators who carry out the manual work of embroidery, thread cutting, and button stitching are usually women, while supervisors, cutters, and master tailors are mostly men. There is gender segregation both physically and by type of work. Some common features of women's employment in these workshops are low wages (sometimes paid on a piece rate basis), long and erratic working hours, and the absence of any workers' organizations. Increased production in some export products may actually increase the employment opportunities in manufacturing for women. Given the rapid rate of urbanization in Pakistan and the possible real income reductions or labor dislocations brought about during a structural adjustment, more women may be compelled to take these kinds of jobs. However, given cultural norms, these jobs will remain indicators of low status where women's supply of labor is motivated by economic necessity and where withdrawal from these occupations will increase as family incomes rise. Furthermore, as Pakistan's rapidly growing population increases the size of male labor force participation, males may be forced to take jobs previously considered distasteful because of their association with women's work. It is also possible that if investment takes the form of mechanizing some textile and garment operations currently performed by women by hand, low-skilled female labor will be replaced by higher-skilled male labor.

Construction: Another category of wage earners is women who work at arduous tasks as unskilled laborers in brick-kilns and quarries and road construction. Micro surveys indicate that 13 percent of female workers in the informal sector are such workers (World Bank, 1989). They are mostly drawn from the rural poor who move from place to place with their families. The earnings of these women are among the lowest of all categories of female urban workers. Men often acquire brick-laying and masonry skills while their wives, working in the same area, are restricted to the more menial tasks. Nevertheless, their earnings constitute a major share of the family income, as high as 42 percent for kiln workers.

Women working in the brick kilns and quarries face a multitude of problems. These problems are sometimes exacerbated by the usurious interest rates they have to pay to employers when forced to take consumption credit to meet their basic needs, particularly during nonworking months. About 91 percent of the women working in kilns are in debt, as are about 76 percent of the families working in the quarries. In most cases, deductions are made from monthly salaries (on which there is usually deferred payment) to repay the loans. These debts are extremely hard to pay off, and result in binding families for generations to the kiln owners. Women's participation in this sector is unrealistically low in official statistics primarily because women laborers are considered part of family labor where only the male head of household is acknowledged as the income earner (World Bank, 1989).

2. Informal Sector Activities

Certain developments in the economy point to the growing importance of the informal sector. Among these developments are the very low or negative levels of labor absorption in large-scale manufacturing. The failure of modern industry to generate employment has, in turn, been attributed to a shift away from relatively labor-intensive consumer goods industries toward more capital-intensive production of intermediate goods. The capital intensification has been brought about by policies such as subsidized interest rates, preferential tariffs favoring capital over labor, and stringent labor legislation.

The urban informal sector is characterized by a large number of small-scale production and service activities that are individually or family owned and use indigenous inputs and labor-intensive, simple technology. It overlaps with the small-scale sub-sector, particularly household enterprises, and covers much of the "service" sector outside public service. Usually self-employed workers in this sector are engaged in activities ranging from

hawking, street-vending, marketing, knife-sharpening, shoe-shining and junk collecting to selling fruits, vegetables, etc. Others find jobs as mechanics, blacksmiths, carpenters, small artisans, handicraft workers, potters, barbers, and domestics. The share of the urban labor force engaged in informal sector activities ranges from 50 to 70 percent in developing countries; in Pakistan it is estimated at about 70 percent. These workers have little formal education, lack capital resources, and are largely unskilled, or have skills acquired outside the formal system through apprenticeship. As a result, worker productivity and income tend to be lower in the informal sector than in the formal sector. Moreover, workers in the informal sector do not enjoy the protection afforded by the formal sector in terms of job security, decent working conditions, minimum wage laws, old age pensions, and so on (Shah et al., 1986; World Bank, 1987, 1989).

Pieceworkers: Micro-level studies indicate that home-based workers constitute 53 percent of all employed women in the urban sector and 77-83 percent of employed women in the informal sector. A rough estimate of 75 percent of the estimated 2 million women working in the informal sector would yield approximately 1.5 million women who are urban, home-based workers. About half of these (or 750,000) are likely to be pieceworkers, which constitutes, after agriculture, the most important source of women's employment.

It is not known how many women work at home for meager wages or are paid on the basis of the quantity of work or pieces produced. Such women produce an array of outputs--paper bags from waste paper, clothing assembled or embroidered from pre-cut pieces, shelled dry fruit or nuts, trinkets, rubber bands, earrings and other jewelry. In general, each woman is isolated in her separate household and makes her individual informal contract with a middleman. The individual nature of the contract leads to different conditions of work, different hours of work, and different rates of remuneration among women engaged in similar activity. Since cultural factors, skill attainment, and household obligations constrain women from seeking better paid jobs outside the home, it is estimated that "there is a vast army of women willing to take on these jobs to make the extra few rupees a week" (Shaheed and Mumtaz, n.d.).

Urbanization and continued rapid population growth places increased pressure on families to have the maximum number possible of income-earning family members. The larger the family, the more hands there are to contribute to family welfare. However, the larger the family, the greater the economic pressure to provide food, clothing, education, health care, etc., particularly when children are too young to work. In families with daughters, there is often pressure to generate additional income for a dowry. And, in fact, among unmarried younger women in their study, Shaheed and Mumtaz found that one of the primary reasons for engaging in piecework was to raise a dowry.

Women who are "invisibly employed" inside their homes do not threaten their families' social status or their husbands' self-esteem while they are still able to contribute to family income. However, this same invisibility sets the stage for exploitative conditions of employment and long, arduous hours of work. According to one study of 300 women in Lahore, essential household chores demand an average of slightly over seven hours a day. In addition, piecework consumes an additional six hours a day on average, doubling these women's workday. The vast majority of the women worked more than 20 days a month. Almost 40 percent of the women in the study work every day of the month the year round as long as there is work available. In terms of getting work, women have to take the initiative themselves to find work. This is usually done through female neighbors or female relatives. In many cases, males have a psychological block about female work and are unwilling to procure work or even to assist women in getting work despite the worth of their added income (Shaheed and Mumtaz, n.d.).

Economic pressure is the overriding factor driving women to engage in piecework despite long hours and meager remuneration. Almost all the women in the Shaheed/Mumtaz study (92 percent) contribute all their earnings to cover everyday household expenses. When they manage to save money, it is used for dowries or for household expenses. The increasing number of women willing to undertake piecework at home, combined with the lack of opportunities available under "respectable" conditions outside the home, keeps a downward pressure on remuneration for piecework (Shaheed and Mumtaz, n.d.).

There is a distinct difference between male and female informal labor markets. The male labor market spectrum includes, at one end, unskilled marginal workers subsisting in such casual jobs as hawking and car washing and, at the other end, small-scale, family owned enterprises that are viable, efficient, and labor intensive. The informal female labor market is organized along different lines, because women's choice of activity is determined by the norms of female seclusion.

Most outdoor activities are taken care of by men, while women live in some seclusion within the family dwelling. Women are not only not among the sellers in the markets, they are a minority even among the customers, because men usually shop for food and other items of daily use. Even non-secluded women are greatly affected in their decision making, especially the choice of occupation, by the general attitude in favor of seclusion. Work in which contact with males cannot be avoided is associated with loss of respect and diminished marriage prospects for single girls. Thus, Pakistan's urban informal labor market is unusually segregated, even for a Muslim country. The workers, street vendors, market sellers, carpenters, mechanics, and barbers are almost exclusively male. Women are confined to being domestic servants (who work in a home mostly when the master of the house is away at work and have dealings only with the mistress) or home-based workers who stitch clothes, make lace, weave baskets, embroider, make food products and home-made cigarettes, etc., for sale by male family members or middlemen). Women also work in productive and service activities that are home-owned--for example, pottery making and leather tanning. The only available information on these subsectors comes from a few micro-level studies (with small sample sizes and inherent limitations) (Mohiuddin, 1980; Shah et al., 1986; World Bank, 1989).

Micro-entrepreneurs: It is estimated that roughly 750,000 women are engaged in micro-enterprises, at various levels. Family-owned micro-enterprises are engaged in both manufacturing and trade, although manufacturing is by far the more important of the two. Typically, the entire family is engaged--women produce the product while men buy the raw materials and sell the finished goods, except in female-headed branches. Examples of goods produced include embroidery products, mirror work, silk and cotton cloth, knitwear, pottery, leather work, and processed foods. These family enterprises can produce a relatively good income, especially when women themselves sell what they produce. Production could also be a perpetual family occupation almost like a caste. Examples include weavers (Dhuna or Julaha), potters (Kumbar), leather workers (Chamar) and sweepers (Jamadar or Mehtar or Bhangi). The social status of such hereditary occupations is uniformly low. Women in these occupations report a need for credit for the purchase of raw materials and better presentation of their products to enable them to become more competitive. These women also require special skills in marketing (Shah et al., 1986).

Workers Outside the Home: Micro-level studies indicate that urban women workers outside the home constitute between 17 and 23 percent of the female labor force according to approximate estimates. This would mean roughly half a million women are workers outside the home in the urban informal sector. Domestic service has recently emerged as a significant source of employment for poor women, especially new migrants, in cities like Karachi and Islamabad. In Karachi, one survey estimated that domestic servants account for 77

percent of workers outside the home. Such work appeals to poor women because it requires no special skills and little or no investment. It also guarantees seclusion and, therefore, respectability. Moreover, the proximity of slums to high-income neighborhoods is an important factor in persuading women to undertake this type of work, because the women can return home relatively easily and cheaply in the evenings. The main problems of women domestics are lack of information systems to inform them of available jobs and inadequate transport services for getting from one workplace to another. They also earn low wages and work long hours. Housing is also often a problem (Shah et al., 1986; World Bank, 1987, 1989).

Self-employed Traders: This group consists mainly of vendors. In recent years there has been a marked increase in the number of women vendors, some of whom also produce the goods they sell. Traditionally, women avoided enterprises that required them to work outside the home, and particularly from work which involved sitting on street corners. Even now, women in marketing are seen only in special markets outside shrines, in special sections of some bazaars, special festivals, or more often at the Friday "Juma Bazaars." These women sell vegetables, processed and semi-processed food, children's clothing, toys, trinkets, bangles, embroidered goods and women's clothing--all goods primarily bought by other women. Mostly they come in groups. They are almost all self-employed with an average monthly income of about Rs 60 (in 1988--a relatively high income for the urban informal sector).

The main constraints faced by women vendors are lack of credit and market information, and difficulty in obtaining authorization to enter markets like the Juma Bazaars. Moreover, the women face increasing competition from men who have better access to credit and cheap sources of raw material. Many women vendors-cum-manufacturers display organizational and entrepreneurial ability and some of them subcontract piecework to other women in the neighborhood (World Bank, 1989).

There is growing evidence that a large number of women in the informal sector are the primary supporters of their families. A study by Mohiuddin found that one third to one half of the workers in home-based production, garment workshops, and domestic service bore sole economic responsibility for their families. Aside from widowhood, abandonment, divorce, and separation, the most important factor in this pattern appears to be economic uncertainty and instability due to spouse's employment (Mohiuddin, 1989). As structural adjustments take effect, there are bound to be winners and losers in income and employment on the household level. Where the income-earning potential of the males of the household falls, family income may become more dependent upon the informal income-generating capacity of the women in the household.

IV. STRUCTURAL ADJUSTMENT ISSUES IN THE 1980s

A. Background to Adjustment: Economic Strategies, 1977-1988

The populist policies under the PPP had alienated the social groups that were important for the military: the large landlords of Sind; the middle-sized farmers of Punjab and the Northwest Frontier Province; the merchants and industrialists of Karachi, Lahore, and Multan; and urban professionals (Burki, 1986). These same groups had provided the support base for General Ayub Khan. Zia adopted Ayub's model of economic management and the economy returned to the growth path it had followed in the 1960s (Burki). However, as Noman points out, the 1977 military overthrow of the government occurred under vastly different circumstances than those in 1958 when Ayub took power. Zia had deposed an elected civilian government during a period when the military did not command the public prestige it had two decades earlier. Lacking political legitimacy, Zia set the military government up as the vanguard for a theocratic state and promised elections that were consistently delayed until 1985 when the referendum was held to provide a basis to keep Zia in power (Hyman et al., 1988).

Economic indicators demonstrate that under Zia, Pakistan returned to a high rate of growth. Some critics point out, however, that the economic prosperity under Zia was superficial, largely based on substantial foreign aid, record remittances from expatriate Pakistanis in the Gulf, and illicit earnings from drugs and guns trade (Hyman et al., 1988). Many of the progressive redistribution policies instituted under Bhutto were reversed as were the land reforms announced by Bhutto's government in 1977. According to Hyman et al. (1988), the government's own economic survey for 1987-88 "admitted that income distribution, both rural and urban, had worsened, even compared to the days of the 1960s when Pakistan's top 22 families controlled two-thirds of the country's wealth" (p.111).

The growth of migrant remittances, particularly from the Middle East, was a major economic development under Zia although the increasing flows of migration can be traced to the Bhutto era. With the delinking of the rupee from the U.S. dollar in 1982, the rupee value of remittances increased significantly. According to Noman, by 1984, remittances constituted the largest single source of foreign exchange earnings and were four times greater than net aid inflow into Pakistan. "Not only did they provide 40 percent of total foreign exchange earnings, but they also financed 86 percent of the trade deficit. Their volume, $3.2 billion, was substantial in relation to the size of the economy. The value of remittances was approximately equal to 8 percent of the GNP" (Noman, 1988, p.157). Some estimates place the value of remittances even higher--perhaps even as high as $4 billion--if money smuggled into the economy is taken into account (Hyman et al., 1988).

Not only did migrant remittances play an important role in increasing the foreign exchange earnings of the government, but they also contributed significantly to improving the living conditions of the poor. In his study of the political economy of Pakistan, Noman (1988) notes that the majority of the migrants are unskilled with a predominant representation from the urban poor. The most widespread representation was from the Punjab (70 percent), followed by Sind (14 percent), NWFP (13 percent), and Baluchistan (5 percent). The vast majority of migrant workers came from low-income households. On average their salaries increased eightfold. "The increased family incomes from remittances have had a pronounced egalitarian impact, in both the urban and rural areas" (Noman, 1988, p. 158).

Multiple benefits accrued as a result of the increased export of labor. Labor export eased the demands on the Pakistani economy to absorb increases in the labor force. It is estimated that during the fifth five-year plan, approximately 33 percent of the increase in labor force was absorbed by overseas migration (Noman, 1988). Remittances also helped to ease the balance of payments problems generated by the rise in oil prices. Increased incomes resulting from remittances increased the demand for goods and services in the economy, leading to an expansion in economic activity, particularly in the urban areas. In some sectors (e.g., construction), overseas migration led to temporary shortages in labor, often leading to increases in real wages for those left behind.

Under Zia, agricultural policies shifted with a negative effect on smallholders. Agricultural credit expanded rapidly between 1978 and 1983; however, lending was concentrated on large- and medium-sized farmers, effectively excluding small farmers from credit markets, extension services, and private organizations for distributing inputs (Noman, 1988). A beneficial weather cycle, together with liberalized price policies and increased availability of inputs, helped improve performance in the early 1980s. Production of the four main crops--cotton, rice, wheat, and sugarcane--reached record levels by 1981-82 and resulted in self-sufficiency in food grains with a small exportable surplus in wheat (Noman, 1988).

In the five-year period from 1978 to 1983, GDP increased, rising steadily by more than 6 percent per year. Noman cautions, however, that the growth in domestic incomes of 6 percent is likely to be an underestimate. "Two developments suggest domestic income has been growing at an even faster pace in recent years. First, drug production has increased substantially--the annual value of the trade is equal to approximately 8 percent of Pakistan's GNP...Second, the multiplier effects of this drug income, as well as the receipt of remittances through unofficial channels, have contributed toward the growth of the 'informal sector' in urban areas" (p. 164).

The sixth five-year plan (1983-88) set out to solve one of Pakistan's persistent problems of regularly importing about twice as much as it exports. Resources were to be concentrated on agriculture and energy development and larger investments were to be made in neglected social sectors such as health, rural water supply, and basic education. By 1985 targets for spending in the social fields had fallen far behind due to lack of domestic resources. Social sector spending continued to be squeezed by defense spending. Nearly 30 percent of central government expenditure was devoted to defense (Noman, 1988; World Bank, 1984). The ambitious sixth five-year plan ran into serious resource constraints. Insufficient public sector investment, particularly in infrastructure, constrained industrial development. Since the Zia government emphasized the role of the private sector in driving development, public sector investment activity was curtailed, focusing primarily on the completion of ongoing manufacturing projects and infrastructure. Inducements were offered to the private sector to increase investment. These included tax holidays, accelerated depreciation allowances, duty-free imports of capital equipment, and improved availability of credit at low rates of interest. Despite these incentives, the private sector response was poor and did not compensate for the cut in public sector investment (Noman, 1988). Although Zia had undertaken some denationalization, the banks were not denationalized and excessive financial and administrative controls remained in place. Noman notes that "[o]nly a small fraction of the major nationalised units were given back. Denationalisation met with little success, as the terms offered were not acceptable to previous owners" (Noman, 1988, p. 172).

Social sector spending reflected the pattern of neglect established since the creation of Pakistan. Although Pakistan already had one of the worst records in social services among developing countries, between 1976/77 and 1982/83 the share of expenditure for education had fallen from 2.1 percent to 1.5 percent. The

World Bank (1984) reported that Pakistan's record on health spending was one of the worst in the world. Meanwhile, expenditures on defense absorbed nearly 30 percent of central government expenditures in the early 1980s.

The disproportionate share of resources that were diverted from the productive and social sectors continued to seriously distort and hampered Pakistan's economic and social development. Hyman et al. (1988) report that during the decade 1978-88 non-development spending rose from Rs 25 billion (1977-78) to Rs 125 billion (1987-88). Over this same period, defense spending rose six-fold accounting for between 32 and 38 percent of total expenditure. For 1988, Pakistan had a record deficit of almost Rs 60 billion in a total outlay of less than Rs 200 billion. Despite rising concern over worsening budget deficits, the Pakistan Aid Consortium committed aid over recent years at a higher level than anticipated.

Many of the problems with Pakistan's economy are essentially structural. While the savings rate has remained extremely low, Pakistan's taxation base has remained far too narrow to yield sufficient revenues to pay for government programs. Successive governments have failed to generate sufficient resources to meet spiralling expenditure, particularly in defense and debt servicing--together estimated to exceed 50 percent of current budgets (Hyman et al., 1988; Noman, 1988). The low level of savings is related in important ways to the pattern of conspicuous consumption encouraged, in part, by increased remittances and illegal revenue activities. The increase in urban wealth has resulted in a glut of imported consumer durables--many of which are exchanged on the black market. Noman states that "[d]ue to easier access to foreign goods, the remittance recipient families have demonstrated a visible penchant for imported luxury goods." This "demonstration effect," Noman contends, has distorted Pakistan's consumption priorities where a majority of the population numbers among the poorest in the world.

The "demonstration effect" has also been bolstered by the growth of the drugs trade. According to some accounts, since 1980 Pakistan has become the single largest exporter of heroine and hashish to the West with a narcotics trade estimated at roughly $3 billion annually. Noman points out that these illicit flows "have led to a rapid growth in the black economy, which public sector financial institutions have attempted to accommodate by issuing bonds, which permit illegally acquired money to become legitimate" (p. 166). The extent of the drug trade is a matter of some debate. However, according to a 1987 estimate made by Pakistan's National Taxation Reforms Commission, Pakistan's parallel economy may amount to close to one third of the country's GNP. Most of Pakistan's "black money" is estimated to be held in non-productive investments--bank deposits, real estate, and undeclared business assets (Hyman et al., 1988).

The inability of the government to raise domestic resources has resulted in an increased reliance on foreign loans to meet development goals. Estimates of Pakistan's total receipts of foreign currency totalled some $40 billion in the period 1980-85. They were made up of export earnings ($15 billion), remittances ($15 billion), and foreign aid ($10 billion). However, the potential benefits of the large sums to help fund the country's development were lost, for the most part, because they went largely to pay for imports of consumer goods, as well as servicing foreign loans, which had grown to $14 billion by 1988 (Hyman et al., 1988). Although Zia's government had considerable money at its disposal and a low rate of unemployment, the money that could have been invested in the long-term development of Pakistan's human resource base and could have been used to correct regional imbalance and disparities was used instead to "fatten the already privileged armed forces and on the imports of large amounts of consumer goods" (Hyman et al., p. 111).

B. Adjustment and Liberalization in the 1980s

Pakistan's adjustment experience in the 1980s was atypical. In most developing countries, structural adjustment was initiated during or shortly after a period of stabilization and economic contraction, as domestic demand adjusted to sharply reduced capital inflows and adverse movements in the terms of trade. Thus, it has often proven difficult to separate effects of structural adjustment -- policy changes restructuring public expenditure and increasing the role of market forces in the development process -- from effects of stabilization. In Pakistan, however, macroeconomic circumstances were favorable for most of the decade due to large inflows of remittances and sound monetary and exchange rate policies; stabilization problems emerged only after 1988. Rather, its adjustment experience emphasized improving efficiency in use of domestic resources by reducing the government's involvement in economic activity. In this sense, Pakistan is one of the few countries where adjustment occurred in an expansionary macroeconomic setting, rather than recession linked to eradication of unsustainable macroeconomic imbalances.

As discussed, Pakistan has a long tradition of debate about the appropriate role for government in the economy (World Bank, 1986). The Ayub government fell in part because of its emphasis on growth at the expense of social justice. The Z. A. Bhutto government was nominally committed to reducing poverty and inequality, but its lack of balance between social concerns and private incentives contributed to economic stagnation and its replacement, in turn, by Zia-ul-Haq. Nominally free market-oriented, the Zia government began a program of denationalization and deregulation which continued into the 1980s. Benazir Bhutto's government similarly committed itself to economic revitalization through liberal economic policy.

Despite differences in ideology, a persistent theme in Pakistani policy-making is distrust in market forces given the country's erratic weather, poor and illiterate population, low savings rate, and slim industrial base. Rather, the government attempted to manage growth by establishing sets of incentives thought to promote the country's developmental objectives. In particular, most aspects of formal sector activity were subject to government regulation, including plant location, imports of machinery, and intermediate inputs, and access to credit. Few transactions were not subject to a license, quota, subsidy, tax, tariff, and/or sanction. There was similar extensive government involvement in efforts to improve productivity in agriculture through irrigation and diffusion of new technologies. Finally, the banking system channelled funds to bureaucratically determined priorities, rather than areas maximizing returns to the country's scarce investment resources.

Adverse effects of extensive government involvement were many: reduced competition, over-priced, low-quality goods, resources wasted in paperwork and pursuit of economic rents, sluggish response to changing market conditions, overly capital-intensive production techniques, and an opaque, bureaucratically encumbered trade regime. The need to go via the government to get access to scarce resources created ample opportunities for corruption. Needless to say, doubt thus cast on people connected to public officials contributed to the downfall of Benazir Bhutto's government in August 1990.

Government intervention particularly encouraged inefficiencies in agriculture and industry. In agriculture, to extend irrigated farming with Green Revolution technologies, the government built a large network of programs and services, supplemented by input subsidies and investments in irrigation. Growth in agricultural output has been strong, averaging over 4 percent annually from 1975 to 1988 despite irregular weather, but government strategy had three main problems. First, infrastructure and incentives for spreading new techniques were not dismantled or streamlined after initial phases, burdening the government with high-cost programs with little economic justification. In particular, fertilizer prices were 30-50 percent below import-parity

levels, while the subsidies absorbed as much as 30 percent of the development budget. Second, output prices were set at artificially low levels in order to keep urban food prices low and provide cheap intermediate inputs to agroindustrial firms. This made it difficult to lift subsidies on production costs since the latter were required to offset disincentive effects of low output prices.

Third, since funds borrowed through the informal rural credit market involve very high interest rates, the government sponsored rural credit institutions offering more favorable terms. These institutions -- which primarily financed tractor purchases -- were financially unviable. They had extremely low loan recovery rates, operated off public funds rather than rural savings, and provided cheap credit to largely well-to-do farmers who could mobilize funds elsewhere. Evidence suggests that only 5 percent of farmers get credit through institutions. They may also encourage capital-intensive farming and rural differentiation. Indeed, a general concern is that government policies toward agriculture favor large landowners, exacerbating already important rural inequality. (For example, 2 percent of the landowners own 23 percent of the land, tenancy rates are very high, and small farmers need landowners to act as intermediaries to gain access to credit, inputs, and marketing outlets.) The government-backed rural credit institutions have been referred to as a "continuous hemorrhage of government and donor-resources" (World Bank, 1986).

Policies governing industry and trade in Pakistan are complex, ad hoc, and anti-competitive. There is a strong legacy of emphasis on import-substitution without attention to efficiency. Fairly high tariffs and quantitative restrictions sheltered domestic firms from competition, while they benefitted from privileged access to credit and imported inputs and machinery. There was a list of imported products which were simply banned. The protective structure gave rise to a thin stratum of firms manufacturing low-quality products using capital-intensive techniques and small, fairly skilled work forces, with little incentive to improve product quality or exploit cost-reducing technological changes.

At the same time, the structure of industrial incentives contained a pronounced anti-export bias. Export-oriented firms were disadvantaged in getting access to credit and imported inputs and machinery compared to import-substituting firms. In periodic export drives and attempts at liberalization, programs were established to offset disincentives to exporters, e.g., rebates to compensate for differential taxes. Perhaps the main effect of these offsetting programs was to lower the transparency of the incentive structure. The lack of diversity in the export base is a particular problem in Pakistan: cotton, textiles, and rice account for 75 percent of merchandise exports but have limited growth potential.

The government has also set prices or become directly involved in production in sectors thought to be of particular social value or strategic importance in the country's development strategy. Prices of vegetable ghee and edible oil were set below international levels, minimizing incentives for cost reduction and encouraging smuggling from Afghanistan and India. In cement and fertilizers, government price fixing and direct investment were intended to stimulate development of downstream industries and limit opportunities for monopoly profits. But then subsidies for production costs were required to offset low prices, and incentives to contain costs all but disappeared under the system of regulated oligopoly which emerged. Resulting scarcities stimulated development of a black market in cement in the late 1970s and early 1980s.

C. Adjustment Progress, 1980-1988

Pakistan's first experience with structural adjustment was a three-year extended Fund facility (EFF) with the IMF in 1980-82. The program facilitated adjustment to the second round of oil price shocks, in part by delinking the rupee from the U.S. dollar and shifting to a managed float against a basket of currencies. The EFF also began work on trade liberalization, price decontrol, restructuring public investment, and general re-vitalization of the private sector as a force in Pakistan's economic growth. An accompanying Structural Adjustment Loan (SAL) from the World Bank was to facilitate diversification away from traditional export crops (cotton and rice), better agricultural project analysis, introduction of irrigation user charges, and improved public enterprise performance. All performance targets were satisfied. Progress on economic liberalization was limited, in part because objectives were overly ambitious and vague. Though the Bank prepared a follow-on SAL, Pakistan opted instead for a set of sector loans, largely because it objected to the cross-conditionalities between policy changes and monetary and balance of payments performance.

Progress in sectoral adjustment has been erratic. The climate of economic boom weakened the government's incentives to undertake policy reforms, as did difficult domestic circumstances (drought, civil and ethnic unrest, the precariousness of return to civilian rule). Moreover, while the government agreed that incentives are important in sustaining growth, disagreement remained over whether free operation of market forces was the best mechanism for establishing those incentives, versus government management of prices and costs with greater respect for efficiency concerns.

In agriculture, the government moved wheat, cotton, and irrigated rice prices into line with international levels, and significantly increased the price of basmati rice. Subsidies on pesticides, seeds, nitrogenous fertilizer, and public mechanization services were removed. Subsidies remain on potassic and phosphatic fertilizers, though these, too, are in the process of being phased out. To date, the policy changes have not had a dramatic effect on the profitability of Pakistani farming. Higher output prices compensated for higher input costs, and available evidence suggests no change in the ratio between the two.

Eliminating the tax-with-offsetting-subsidy system is undoubtedly a positive development: it improves transparency of the incentive structure and frees up scarce fiscal resources for higher priority uses. But it did not induce noticeable flows of productive resources into or out of agriculture, nor did it significantly change output composition. Nonetheless, the tight labor market resulting from outmigration and the general economic boom pushed up real wages in the agricultural sector. For example, real wages for male casual workers in agriculture rose by more than 6 percent per year (World Bank, 1988).

In industry, important reforms included reducing the list of disallowed imports to religiously-objectionable items; a 40 percent increase in the level of investment subject to government sanction; reduced anti-export bias in access to intermediate inputs and capital goods; allowing private investment in areas previously dominated by public enterprises (vegetable ghee, edible oil, beverages); and measures to raise the efficiency of public enterprises and utilities (e.g., higher phone rates and installation charges and increased electricity rates).

These changes are expected to bring about long-term improvements in Pakistan's international competitiveness, in particular by improving the transparency of the trade regime, enhancing businesses' flexibility in responding to changing market conditions, and increasing pressure to improve product quality and lower costs. They undoubtedly contributed to strong industrial performance in the 1980s. Manufacturing output rose at an

average annual rate of 7.8 percent between 1983 and 1989. The value of exports doubled in real terms in the same period. While traditional exports (raw cotton, cotton yarn, cotton cloth, and rice) contributed importantly to this growth, there was also significant expansion of non-traditional exports, including ready-made garments, synthetic fabrics, sporting goods, and surgical equipment.

Despite rapid output growth, available data show the share of manufacturing in total employment remaining constant over the period at 13-14 percent (World Bank, 1988). This may be due to the fairly capital-intensive nature of new export activities. This seems inconsistent with Pakistan's apparent labor abundance but is probably explained by (a) restrictive labor legislation covering large-scale manufacturing, (b) the importance of standardization and consistent product quality to be competitive in world markets, and (c) scarcity of skilled and semi-skilled labor. Official figures may also underestimate employment growth in small-scale manufacturing enterprises, which include many of the newly-established export-oriented firms and "putting out" workshops which subcontract to them. (For example, special surveys of small-scale manufacturing found employment growth of 80 percent between 1977 and 1984.)

The rapid expansion of the ready-made garment industry -- exports more than doubled in the 1980s -- was perhaps most significant in terms of job creation for women. As discussed above, the garment sector makes important use of female labor, often in segregated workshops performing low-productivity repetitive tasks for which little equipment, training, or supervision is required (e.g., button-stitching, thread-cutting, embroidery). Though data are not available to quantify employment growth of this kind, there is a widely-held impression that it is contributing to changes in "society's" views on women's employment, albeit in the limited realm of "respectable" ways of working, i.e., with clear gender segregation (Shaheed, 1990).

In infrastructure, water and sewage tariffs were adjusted. Adjustment mechanisms were put in place in four large cities to recover costs of operation and maintenance. In energy, a new ex-refinery pricing formula was introduced in January 1989. The gas producer pricing formula was modified for offshore operations. Electricity tariffs and prices of natural gas supplied to domestic household consumers were raised.

D. Recent Stabilization

Pakistan's macroeconomic situation deteriorated significantly in the late 1980s. The fiscal deficit rose steadily, reaching 8.6 percent of GDP by 1988, the final year of the sixth five-year plan. Inflation rose from 4-5 percent in the mid-1980s to close to 10 percent in 1989. Strong export growth was more than offset by increased imports and deterioration in the service account. The current account deficit rose to 4.1 percent of GDP -- well above the 3.3 percent annual average for the 1980s. By the end of 1988, Pakistan's gross official foreign exchange reserves covered only about three weeks of imports (World Bank, 1989a).

Trends in the fiscal deficit were clearly not sustainable, and the fiscal imbalance was targeted as the country's most serious macroeconomic problem requiring immediate structural policy actions. The government adopted a three-year adjustment program endorsed by the World Bank and the IMF, implemented in July 1988 with the announcement of a package of fiscal, trade, and other reforms with the 1989 budget and subsequent fertilizer and public utility price adjustments (World Bank, 1989a).

Prime Minister Benazir Bhutto endorsed the adjustment program that had been initiated under Zia and promised to continue the liberalization process in the economy. The government produced a policy framework paper (PFP) that was considered by the World Bank's Executive Directors in December 1988 and a stand-by arrangement and structural adjustment facility supported by the PFP was approved by the IMF's Executive Directors. In December 1989, the second-year PFP was considered by the Directors of both institutions.

The main elements of the 1989-92 adjustment program are:

1. A reduction in the government budget deficit. On the expenditure side, measures should reduce growth of current expenditures and lower subsidies, while freeing up resources for public investment. Planned investment in physical and social infrastructure will increase in real terms. However, the ratio of these expenditures is low (below 7 percent) and is not expected to rise. Measures to restrain growth of current expenditure include holding civil service salary increases below the level of inflation, placing tighter limits on discretionary grants to Provinces and reducing defense expenditures in real terms. On the revenue side, increases are anticipated through a phased broadening of coverage of the sales tax, which will be replaced by a general sales tax by 1991; restructuring the income tax system; removing most exemptions from the standard customs duties; and increasing prices for public utilities and other services.

2. Credit policy and domestic liquidity reforms. These include adopting cautious domestic debt policies and keeping growth of domestic credit and money supply in line with the growth of nominal GDP at the target rate of inflation, while permitting adequate growth in credit to the private sector.

3. Debt management reforms. While reducing the fiscal deficit will reduce the government's borrowing needs, debt management reforms should rationalize the rate structure of its domestic debt instruments. These measures are expected to help reduce the segmentation in the financial market, and improve the profitability of commercial banks by gradually relieving their burden as captive institutions for low-cost borrowing by the Government.

4. Financial sector reforms. These are aimed at restructuring the government debt and interest rates; improving the financial health of the banking system, strengthening the State Bank of Pakistan as a regulatory and supervisory agency, and ensuring the long-term development of capital markets.

5. Foreign trade and industrial reforms. These continue the trend toward trade liberalization, including replacing non-tariff barriers by tariffs, reducing the number of banned commodity categories from about 400 to 80 by 1992, and gradually reducing the maximum tariff from 225 percent to 100 percent by 1991. To promote exports, the previous uniform income tax rebate system will be replaced with a graduated one that encourages higher valued exports, and the private sector will be allowed greater involvement in exporting rice

and cotton. Continued exchange rate flexibility will facilitate the ongoing import liberalization process and foster growth of exports, especially non-traditional items. Export diversification should become visible in the next few years, with traditional exports other than cotton and cotton products and non-traditional exports outpacing the growth of cotton manufactures. The ongoing shift in textiles toward higher value-added products should ensure better utilization of quotas in the industrialized countries. Rice exports are expected to increase by about 27 percent with the introduction of new high-yielding varieties.

The program should make considerable progress toward restoring macroeconomic balance. By 1992, it is projected that the budget and current account deficits will fall to 5 percent and 2.6 percent of GNP, respectively, inflation will decline to 6 percent, and civilian external debt service will be reduced to below 22 percent. Despite increased fiscal and monetary restraint, strong growth was expected to be sustained through the stabilization period, with real GDP continuing to rise by 5.0-5.5 percent through 1992. This assumes that private sector production and investment will continue to expand due to the improving macroeconomic situation, creation of profitable new investment opportunities by de-regulation and trade liberalization, and continued improvements in physical infrastructure. However, the impact of recent developments in the Gulf--particularly declining remittances, the inflow of returning migrants, and reduced demand for Pakistani exports by workers in the Gulf--will make it considerably more difficult to eradicate macroeconomic imbalances without slowing real growth.

Policy reforms adopted in the first two years of the structural adjustment were in line with the PFP, although macro targets for the fiscal and current account deficits were not achieved in 1989 due to an unanticipated deterioration in the terms of trade. With the concurrence of both the World Bank and the IMF, the end-program targets were extended for one year to 1992. During the first year of the program, structural reforms were broadly implemented as planned and economic growth (5.6 percent) exceeded the target rate of 5.2 percent. Inflation was contained below the projected rate of 10 percent through tight credit policy and fiscal constraint. Private investment increased as did export volume. Objectives were not met in the fiscal area, domestic pricing, or balance of payments. Revenue targets were met and the fiscal deficit was reduced from 8.6 percent of GDP in 1988 to 7.3 percent in 1989 (the target, however, was 6.7 percent). The external current account deficit did not decrease as projected nor did gross international reserves increase as projected. Higher debt service payments, lower migrant remittances, higher capital goods imports, and a sharp deterioration in the terms of trade increased the external current account to 4.7 percent which was financed through larger disbursements from the Asian Development Bank and existing loan commitments.

From available evidence, the combination of favorable circumstances and the adjustment program contributed to strong economic performance in 1989. Agriculture was the major contributor to growth after two years of sluggish performance. Favorable agricultural growth was attributed to increased value added in major crops, although the production of important crops like rice and cotton was stagnant due to adverse weather conditions. There were marked increases in wheat and sugarcane production resulting from ample water supply and the expansion of production areas. Increased procurement prices contributed to increased sugarcane production. Strong price incentives for basmati rice caused a significant output growth and a substitution from other lower value added varieties.

Industrial growth slowed, most significantly in the large-scale manufacturing sector (Table 2.9). Until 1989, industrial growth had been stimulated by expansionary fiscal policy, terms of trade gains, and large real exchange rate depreciation. The slowdown in non-agricultural sectors was widespread across all industrial sectors, except energy. The growth rate declined in 14 manufacturing industries, accounting for more than 40 percent of the total value added in large-scale manufacturing. In 8 of these, production actually fell (cigarettes, beverages, vegetable ghee, cotton cloth, cement, steel billets, jute products, and trucks). Production stagnated in 3 other key sectors (pharmaceuticals, pig iron, and tea processing). Only 4 sub-sectors (chemicals, fertilizers, coke, and tractors) recorded real increases in value added.

Inflation, as measured by the consumer price index, declined from 10.4 percent in 1988 to 6.3 percent in 1989 (Table 2.10). This resulted from tighter bank credit, lower official reserves, the reduction of the fiscal deficit, and increased supply of basic food items. After December 1988, the Government arranged to import large quantities of wheat and absorbed part of the higher prices of imported fertilizer and edible oils in the budget. Export duties were imposed on certain food items to increase domestic supply. Nevertheless, price increases for food, beverages, and tobacco were considerably higher than the increase for other commodities. Increases in wheat production notwithstanding, domestic wheat supply was insufficient to meet demand. Other scarcities resulted from reduced production of minor crops due to long periods of drought followed by floods. These affected pulses, and the production of chickens, eggs, and red chilies.

It is estimated that overall employment was not adversely affected by policy-induced changes in the first year of the adjustment program or by external events. However, since the rate of growth was higher in agriculture than in industrial production, employment opportunities may have been better in the rural than the urban areas.

The trade balance was seriously affected by adverse external developments, namely an 8 percent terms of trade deterioration, equivalent to about $400 million or 1 percent of GDP. International prices for many exports fell by 10 percent or more, while import prices rose by 3 percent. Declines in import prices of 15 percent for crude oil and 23 percent for petroleum production only partially compensated for marked increases in import prices for fertilizer (24 percent) and edible oils (11-13 percent). Export prices for raw cotton fell by 9 percent in FY89 as harvests in China, the Soviet Union, and the United States expanded supply to the world market. Prices for cotton manufactures and other traditional exports such as leather goods weakened as international competition intensified. A number of developing countries intensified their export promotion, offering upgraded qualities of traditional export goods. Compared to 1988, 1989 prices were lower for cotton yarn by 19.5 percent, cotton cloth by 3.5 percent, rugs by 8.7 percent, synthetic textiles by 16.7 percent, and footwear between 4 percent and 25 percent. Prices for some export products increased: rice--for qualities other than basmati--rose by 18 percent, fruits by 5.7 percent, and vegetables by 63 percent. While export prices of cotton and cotton yarn and fabric declined in the first half of 1989, and showed some signs of recovery in the second half, prices of traditional products other than cotton softened in the last six months of the fiscal year.

Growth in overall export volume was strong in 1989 (Tables 2.11 and 2.12). Raw cotton increased by 67 percent in volume terms, and non-traditional exports by 6 percent. Cotton manufactures also contributed to export volume growth by 5 percent. The growth of imports in volume terms slowed from 8.4 percent in 1988 to 1.2 percent in 1989. While large quantities of wheat were imported and imports of private capital goods grew rapidly (Tables 2.13 and 2.14), other imports declined. The decline in defense and other public imports reflected lower government spending under the adjustment program.

TABLE 2.9: PAKISTAN

GROSS DOMESTIC PRODUCT BY SECTOR AT CONSTANT 1980/81 PRICES, 1981/82 - 1988/89

Changes Over Previous Period In Percent

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89 Prel.	1985/89 Av. Growth
Agriculture	4.7	4.4	-4.8	10.9	5.9	3.3	2.7	6.1	5.7
Major crops	4.7	3.2	-14.3	18.2	6.5	1.6	2.9	7.0	7.1
Minor crops	8.1	6.5	3.4	2.8	3.9	3.4	-2.8	3.2	2.1
Livestock	3.1	4.3	6.0	6.1	6.2	5.7	5.7	5.9	5.9
Fishing	0.7	9.2	5.6	5.2	7.6	3.0	3.7	5.7	5.0
Forestry	3.0	14.0	13.8	0.1	3.0	11.2	2.4	14.9	6.2
Industry	10.7	4.9	7.	7.8	8.1	8.6	8.8	3.8	7.4
Mining and quarrying	10.8	-0.3	1	13.5	23.7	7.5	13.9	1.9	12.2
Manufacturing	13.8	7.0	7.9	8.1	7.5	7.5	10.0	3.8	7.4
Large-scale	15.7	6.6	7.7	8.0	7.3	7.2	10.6	2.2	7.0
Small-scale	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.7	8.4
Construction	5.7	-2.7	1.0	9.4	6.7	5.2	2.7	7.2	
Electricity & gas dist.	1.6	6.7	13.5	2.6	11.7	10.1	5.9	5.6	7.1
Services	7.9	9.2	7.9	7.9	5.8	5.9	6.8	5.2	6.3
Transport, storage,		8.0							
& communication	8.3	8.4	8.3	7.9	4.9	7.2	6.8	4.4	6.3
Commerce	9.7	15.5	4.6	11.7	6.7	6.0	9.0	5.0	7.7
Banking & insurance	17.0	14.5	16.9	-0.2	3.5	0.6	3.7	4.6	2.4
Housing	9.8	10.0	14.8	10.2	5.3	5.3	5.3	5.3	6.2
Publ. admin. & defense	1.4	6.5	7.9	3.1	5.3	5.5	4.2	5.5	4.7
Other services	6.5		6.5	6.5	6.5	6.5	6.5	6.5	6.5
GDP at factor cost	7.6	6.8	4.0	8.7	6.4	5.8	6.2	5.1	6.4

SOURCE: WORLD BANK, 1989.

TABLE 2.10: PAKISTAN

CONSUMER AND WHOLESALE PRICE INDICES

	Consumer Prices			Wholesale Prices		
	Index	Percentage		Index	Percentage	
	80/81=100	Period Avg.	End of Period		Period Avg.	End of Period
1985/86	137.6	4.4	3.4	137.0	4.6	3.6
1986/87	142.5	3.6	5.5	143.8	5.0	8.4
1987/88	151.5	6.3	7.4	158.2	10.0	8.5
1988/89	167.2	10.4	8.2	173.5	9.7	10.1
Q1 1987/88	149.0	5.9	6.1	154.9	10.6	10.7
Q2 1987/88	150.7	5.6	4.7	157.2	10.2	10.1
Q3 1987/88	150.9	6.2	7.6	159.3	10.1	9.8
Q4 1987/88	155.8	8.0	7.4	161.5	9.3	8.5
Q1 1988/89	164.2	10.2	10.2	170.4	10.0	10.5
Q2 1988/89	166.8	10.7	10.8	172.7	9.9	9.0
Q3 1988/89	167.4	10.9	10.3	172.9	8.5	9.1
Q4 1988/89	170.5	9.4	8.2	178.0	10.2	10.1

SOURCE: WORLD BANK, 1989.

TABLE 2.11: PAKISTAN

EXPORT PERFORMANCE OF SELECTED GOODS, 1987/88-1988/89

	Weight in total exports	1st sem. 1987/88	2nd sem. 1987/88	1st sem. 1988/89	2nd sem. 1988/89	1st sem. 1987/89	2nd sem. 1987/89
						Change (in percent)	
Cotton manufactures (US$ million)	42	851.9	810.3	816.8	940.5	-4.1	16.1
Cotton yarn (US$ million)	13	273.8	268.7	271.3	333.3	-0.9	24.0
Volume		101.6	109.3	126.2	165.8	24.2	51.7
Price		2.7	2.5	2.2	2.0	-20.2	-18.2
Cotton fabrics (US$ million)	10	262.8	220.9	225.2	239.0	-14.3	8.2
Volume		461.0	387.6	433.0	412.0	-6.1	6.3
Price		0.6	0.6	0.5	0.6	-8.8	1.8
Ready made garments (US$ million)	7	177.3	172.1	156.7	181.2	-11.6	5.3
Volume		7,948.0	6,896.0	7,933.0	8,223.0	-0.2	19.2
Price		22.5	25.0	19.8	22.0	-11.5	-11.7
Tarpaulin/Canvass (US$ million)	1	14.9	19.6	18.0	23.3	21.2	18.9
Volume		7.9	9.8	9.0	11.2	13.9	14.3
Price		1.9	2.0	2.0	2.1	6.4	4.0
Hosiery (US$ million)	4	65.8	68.8	77.6	91.1	17.9	32.4
Volume		5,254.0	5,730.0	6,084.0	6,575.0	15.8	14.7
Price		12.5	12.0	12.8	13.9	1.8	15.4
Towels (US$ million)	3	57.3	60.3	68.0	72.7	18.7	20.6
Volume		14.4	14.5	16.2	18.0	12.5	24.1
Price		4.0	4.2	4.2	4.0	-2.9	2.9
Other traditional exports (US$ million)	15	427.5	433.6	334.6	450.5	-21.7	3.9
Leather (US$ million)	5	131.5	154.9	112.5	131.7	-14.5	15.0
Volume		9.8	10.1	7.3	9.2	-25.5	-8.9
Price		13.4	15.3	15.4	14.3	14.8	-6.7
Carpets (US$ million)	5	116.7	95.4	95.4	217.8	-18.2	59.2
Volume		1,448.0	1,608.0	1,217.0	3,148.0	-16.0	95.8
Price		80.6	85.1	78.4	69.2	-2.7	-18.7
Fish (US$ million)	2	67.7	56.8	67.8	42.8	0.2	-24.6
Volume		21.5	22.1	23.8	21.3	10.7	-3.6
Price		3.2	2.6	2.9	2.0	-9.5	-21.8
Synthetic textiles (US$ million)	3	111.6	85.0	58.8	58.3	-47.3	-31.5
Volume		175.2	122.7	111.0	102.2	-36.6	-16.7
Price		0.6	0.7	0.5	0.6	-16.8	-17.7

SOURCES: MINISTRY OF FINANCE, PAKISTAN; AND WORLD BANK.

TABLE 2.12: PAKISTAN
MERCHANDISE EXPORTS, 1983/84-1988/89
(In millions of US dollars)

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89
Rice	422	222	342	300	363	304
of which: Basmati	244	110	173	134	160	156
Raw cotton	132	279	513	447	610	930
Cotton-based manufactures	983	920	1096	1587	1865	1970
Cotton yarn	218	260	279	507	543	608
Cotton cloth	360	306	315	346	487	467
Ready made garments	162	132	206	355	351	338
Made-up articles	123	130	210	259	319	348
Hosiery	56	43	55	97	135	168
Tents and canvas	64	49	31	23	30	41
Other traditional exports	514	411	478	717	863	704
Leather	146	153	180	238	287	245
Carpets and rugs	172	134	166	200	253	232
Fish and fish prep.	75	82	83	122	125	109
Synthetic textiles	121	42	49	157	198	117
Non-traditional exports	676	625	610	640	764	780
Leather garments	14	22	45	88	97	105
Leather gloves	19	26	34	35	39	39
Sports goods	49	44	49	58	65	71
Surgical instruments	32	51	52	55	57	64
Fruits and vegetables	40	38	42	43	50	47
Guar gum finish prod.	24	22	27	34	53	40
Petroleum and products	41	34	32	26	27	18
Footwear	16	16	15	16	21	19
Spices	12	12	11	12	20	17
Raw wool and animal hair	14	19	18	20	19	20
Chemicals and pharma. prod.	18	12	8	10	17	17
Tobacco	11	11	12	13	18	1
Crude animal materials	8	9	11	12	16	18
Other	378	309	254	238	265	303
Exports (c.i.f.)	2727	2457	3039	3691	4465	4688
Memorandum items: Volume of selected export items						
Rice ('000 MT)	1265	719	1316	1259	1210	854
of which: Basmati ('000 MT)	406	174	260	187	222	228
Raw cotton ('000 MT)	98	263	638	642	502	840
Cotton yarn ('000 MT)	102	124	158	259	211	292
Cotton cloth (mill. of M2)	664	688	727	693	849	845
Woolen carpets and rugs ('000 M2)	2193	1958	2560	2657	2955	3044
Leather (mill., m2)	17	16	18	20	20	17
Fish ('000 MT)	28	36	36	40	44	45

SOURCE: MINISTRY OF FINANCE AND ECONOMIC AFFAIRS.

TABLE 2.13: PAKISTAN

MERCHANDISE IMPORTS 1/, 1983/84-1988/89
(In millions of US dollars)

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89
Food and live animals	395	525	611	526	437	783
Wheat	64	181	293	69	105	388
Tea	191	181	135	154	128	165
Other	140	162	183	303	204	230
Beverage and tobacco	2	2	2	2	2	2
Raw materials	382	340	306	329	464	385
Crude fertilizer	15	14	11	6	4	11
Synthetic fibers	66	55	61	78	110	113
Other	301	271	235	246	340	261
Fuels	1459	1484	1093	863	1096	1023
Edible oils	534	521	426	292	512	504
Chemicals	634	663	723	919	1004	1113
Basic manufactures	706	677	622	669	793	898
Iron and steel	229	211	207	208	222	302
Textile yarn	130	116	103	99	130	140
Other	347	350	313	362	440	456
Machinery, transport, and other equipment	1449	1565	1689	1606	1873	2086
Miscellaneous manufactures	127	138	166	179	234	237
Total imports	5687	5915	5638	5385	6394	7069

SOURCE: MINISTRY OF PLANNING AND DEVELOPMENT.

1/Customs data on mixed c.i.f. basis which differs from balance of payments data with respect to timing, coverage, and valuation.

TABLE 2.14: PAKISTAN

MERCHANDISE EXPORTS AND IMPORTS BY ECONOMIC CATEGORIES, 1983/84-1988/89

	1983/84	1934/85	1985/86	1986/87	1987/88	1988/89
Exports		(In millions of US dollars)				
Primary commodities	801	723	1063	979	1258	1542
Semimanufactures	384	440	489	770	872	884
Manufactured goods	1586	1340	1523	1943	2350	2279
TOTAL	2771	2503	3074	2691	4480	4704
		(Shares in % of total)				
Primary commodities	28.9	28.9	34.6	26.5	28.1	32.8
Semimanufactures	13.9	17.6	15.9	20.9	19.5	18.8
Manufactured goods	57.3	53.6	49.5	52.6	52.4	48.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Imports		(In millions of US dollars)				
Raw materials	3083	3063	2562	2469	3208	3286
Consumer goods	2747	2743	2254	2111	2750	2768
Capital goods	336	321	308	358	458	518
Consumer goods	797	948	1018	945	915	1218
Capital goods	1812	1911	2058	1972	2304	2582
TOTAL	5692	5923	5638	5385	6428	7086
		(Shares in % of total)				
Raw materials	54.2	51.7	45.4	45.8	49.9	46.4
Consumer goods	48.3	46.3	40.0	39.2	42.8	39.1
Capital goods	5.9	5.4	5.5	6.7	7.1	7.3
Consumer goods	14.0	16.0	18.1	17.5	14.2	17.2
Capital goods	31.8	32.3	36.5	36.6	35.9	36.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: MINISTRY OF PLANNING AND DEVELOPMENT.

Note: Based on customs data, which differ from balance of payments data due to timing and coverage.

Fiscal performance remains the area of greatest vulnerability in Pakistan's adjustment program. The Benazir Bhutto government was confronted with the need to undertake additional measures to mobilize resources and control expenditures under the difficult circumstances of having only a narrow parliamentary majority and pressures to expand expenditures in defense due to increasing conflict in Kashmir and social unrest in Sind. In August 1990, a mere nineteen months after Benazir Bhutto took office, President Ghulam Ishaq Khan dissolved the Bhutto government on charges of corruption and failure to keep law and order. During the same month, forces from Iraq invaded Kuwait, precipitating a global security crisis and placing thousands of Pakistani migrant workers in jeopardy. At this writing, it is too soon to predict the impact of the change in government or the crisis in the Middle East brought on by the Iraqi invasion of Kuwait on Pakistan's economy and the prospects of meeting the objectives of the structural adjustment program.

V. THE IMPACT OF ADJUSTMENT ON WOMEN IN PAKISTAN

A. The Issue of Women and Adjustment

The World Bank (1988) distinguishes between stabilization and structural adjustment as follows. (a) Stabilization policies generally rely upon demand management to achieve fiscal and balance of payments current account deficits, and to reduce the rate of price inflation. (b) Structural adjustment entails the reform of policies and institutions in the micro-economy (e.g., taxes and tariffs), the macro-economy (e.g., fiscal policy), and institutional interventions. The economic changes brought about by structural adjustment policies are meant to improve resource allocation, increase economic efficiency, expand growth potential, and increase the economy's resilience to shock. Both stabilization and structural adjustment are forms of economic policy change designed to achieve (1) internal and external balance or (2) changes in the structure of incentives and institutions, or, in many cases, both. Stabilization emphasizes the former, structural adjustment the latter (World Bank, 1988, 1990).

The effects of adjustment policies, and their consequent economic changes, fall unevenly on populations for a number of reasons. First of all, adjustment policies are implemented in societies with pre-existing social and economic inequalities. These inequalities may be exacerbated, improved, or left unchanged by economic adjustments. Pre-existing inequalities may also amplify or diminish the general social and economic effects of adjustment so that one group may be more strongly affected than another.

Secondly, a country's productive capacity may be relatively inflexible--a common characteristic of underdevelopment--and may, therefore, limit the necessary supply-side response favoring some groups over others--often those who already hold an advantaged position. Institutional and marketing bottlenecks may also limit or slow supply-side responses and may favor groups in certain locations, with access to resources (including political influence), and with certain minimum levels of education (Joekes et al., 1988). Thirdly, significant lag effects may occur between the implementation of the policy and its desired effect. During the transition period, the welfare of some segments of the population may suffer or benefit disproportionately. Negative impacts on some groups may be irrecoverable even when the policies have reached their full implementation.

Additional distinct difficulties exist in describing the effects of structural adjustment on specific segments of any population. Human beings live in circumstances resulting from both past conditions and current events. It is difficult to distinguish the effects of the conditions that lead to the need for adjustment and those induced by policy change. Economic policy changes deal necessarily with economic variables. However, non-economic variables (e.g., culture, religion, ideology, gender roles) may have important impacts on the ability of some segments of the population to respond to economic change. These non-economic variables may exert considerable influence over the achievement of policy goals. The linkage between economic and demographic variables (e.g., high fertility rates, low literacy rates) may not be clear. Yet demographic variables, such as rapid population growth, may undermine the medium- and longer-term adjustment prospects. In most known societies, individuals live in social units--generally families, households, or kinship groups (hereafter referred to generally as households)--that commonly serve as intermediaries between economic processes and individual welfare. The mediating role the household plays between the larger societal processes and the individual may be strong or weak and may vary significantly across class and ethnic groups within a society.

Households, and their members, can potentially be affected, favorably, unfavorably, or not at all, by individual events and policies. Moreover, economic processes and policies can affect individual household members in different ways. In general, neither social nor economic change is instantaneous. Consequently, the impact of policy changes often involves complex chains of cause and effect. To survive, households must balance income, production, consumption, and investment decisions. The impact of policy change for each household may strongly depend upon the exact balance of these factors at the inception of the policy. Households differ significantly in characteristics. Hood et al. (1988) group households according to several characteristics: geographic location (urban or rural); sectoral income source (industrial export, industrial import substituting--protected, unprotected or negatively protected, industrial sector non-traded, service sector, agricultural sector export, agricultural sector import substituting--protected, unprotected or negatively protected, agricultural sector non-traded, and government sector); employment status (unemployed, self-employed or paid--unskilled, semi-skilled or managerial); and composition of consumption (manufactured goods--imports, manufactured goods--exportables, manufactured goods--import substitutes--protected, unprotected or negatively protected, manufactured goods non-traded, services, agricultural goods--imports, agricultural goods exports, agricultural goods--import substitutes--protected, unprotected or negatively protected, and agricultural goods non-traded).

Households differ significantly in age and sex composition, in nuclear and non-nuclear organization, in the sex of the primary economic agent (s), in the relative power and authority of individual members, and in the relative influence of religious, traditional, and cultural norms and wider social and economic processes. Further, despite the common use of the household as a basic unit of social and economic analysis, households do not necessarily operate as rational social and economic agents providing equally for the survival and well-being of all their individual members, and significant disparities may exist in the intra-household allocation of resources and well-being (Altomare, 1990; Moock et al., 1988). Moreover, intrahousehold characteristics may include a mix of the characteristics described by Hood et al. above which may change dramatically over time.

When the specific segment under examination in a society is a subset of all (or most) households, as it is in the case of women, the difficulty is compounded considerably in describing the differential effects of a particular set of policies on that group, and generalizations must be made with extreme caution. However, it is well-documented (Altomare, 1990; Blumberg, 1989; Boserup, 1970; Boserup and Liljencrantz, 1975; Bruce, 1989; Dixon-Mueller, 1985; Dwyer and Bruce, 1988; Grown and Sebstad, 1989; Seager and Olson, 1986; Sivard, 1985; United Nations, 1980; UNDP, 1989; Waring, 1988) that among the inequalities that exist across societies, the inequality between males and females is virtually universal and cuts across both class and ethnic backgrounds. Studies indicate that this obtains to varying degrees in all countries from the least developed to the most industrialized and across the political, economic, and ideological spectrum. These inequalities are generally manifested in differential access to and control over vital productive resources (land, labor, capital, technology), social resources (health, education, employment, social security), and personal resources (time, labor, and fertility) and in differential responsibility for coping with the effects of social and economic change. The degree and form this inequality takes may vary significantly across and within households having different organization and characteristics.

These difficulties notwithstanding, there are several important reasons to study the differential effects of adjustment policies on women. Women are major actors in the response of households to economic change. Because of their different roles and responsibilities, women's individual response to change in the economic environment may be significantly different from men's. Economic change may increase pressure upon the household to engage in income-generating activities to obtain the necessary goods and services needed to survive. Under these circumstances, inasmuch as women have unequal access to and control over resources, they will be

severely constrained from responding to economic incentives that would otherwise lead to important economic contributions to family survival and well-being.

Where insufficient cash resources can be generated by the economically active members of the household, it is often women who must devise coping strategies. Women adapt their behavior to the effect economic changes have on their households by increasing the amount of time they work at home or in the labor markets. They make adjustment socially possible by stretching the income and resources of the household. As the price structure changes, households often have to change the composition of their diets in favor of cheaper foods that often require greater labor time for preparation--a task generally falling to women. Among urban populations where the option of growing their own food is limited or non-existent, the urban poor often must reduce their intake of essential foods in absolute terms. In rural areas, greater demands may be placed on the production of food crops heavily dependent on women's labor time at the same time that women's labor is demanded in cash crop production as unpaid family laborers.

The response of families to economic changes is not the sole responsibility of women nor are women the only members of the household who must devise coping strategies. However, the coping responsibility may not be equally shared among members of the household. In fact, the added tension and work created by the need to prepare unprocessed food at home and to find cheaper substitutes for more expensive goods and services for household consumption may fall more heavily to women as the primary care-takers of the household. The final effect of higher prices and malnutrition may also particularly affect women. Pregnant and lactating women have higher nutritional requirements than most other household members. Women are usually the primary health-care providers for sick infants, children and adults, and illness increases with malnourishment, in turn placing even greater demands on women's time and energy.

The contraction of household buying power generated by a decline or slower growth rate of real wages among a household's economically active members may lead more women to seek income-generating activities in the formal and informal sectors without a corresponding reduction in the demands on their time and energy for household work. These women are generally the same women who must, indeed, increase their coping strategy activities within the household. Obviously, the poorer the household, the greater the demand that is placed on all of its members--male and female--to engage in income-generating activities Increased demands for household labor, however, commonly fall disproportionately on women.

Although the transition period brought about by economic policy reform may increase the hardship among some segments in the population, the justification for the inequality of hardship is that the medium- and long-term economic benefits will accrue to all sectors of society as conditions for sustainable growth are established. As the adjustment takes place amidst pre-existing inequalities based on sex, it is important to ask what the medium- and long-term impact of adjustment will be on these inequalities as well as what potential effect these inequalities may have on the medium- and long-term prospects for successful adjustment.

B. The Case of Pakistan

In Pakistan, inequalities based on sex are deeply entrenched in all social and economic processes. The prevalence of purdah observance confines most women to the household. In general, only those women who must, out of economic necessity, work outside the household and those who belong to the economic elite do not observe the stricter forms of purdah. For Pakistani women, not only does the household mediate between the wider social and economic processes, it also serves as the dividing line between their world and the world of

men. Pakistani women's social and economic roles are focused inward into the household. Men are almost exclusively the agents positioned to respond to changes in economic market signals. Women are almost exclusively the agents who must cope with these changes within the household. As women face social sanctions constraining them from activities outside the household, men are similarly constrained in helping out with household, or "women's" work. This extreme segregation of social and economic roles and activities suggests that economic adjustment will have very different impacts on men and women in Pakistan.

Isolating the impact of adjustment on different segments of society requires examination of the targets of adjustment policies for different economic sectors, the instruments used, the achievement of objectives with respect to targets, and the response of the given segment to the policy-induced changes. Such an examination is extremely difficult if the adjustment is incomplete, if changes are not unambiguously induced by specific policies or if the response of the particular segment is more strongly influenced by non-economic rather than economic factors.

Pakistan's economic history has been one of adjustment to changing political regimes and ideologies, internal and external conflict, and a changing global economic environment. To date, however, the experience with specific "structural adjustment policies" has been singularly undramatic. Pakistan has had a history of relatively buoyant growth. However, this growth has been insufficient to move the country out of the "low-income" category, and growing macro-imbalances in recent years have raised serious concerns about the country's ability to sustain this strong growth record. Despite its relatively strong economic growth, Pakistan remains a poor country with weak infrastructure, productive capacity, and human resource development. These weaknesses are compounded by a rapid population growth that promises to place greater strains on already inadequate resources.

As was discussed earlier (Section III), major life decisions in a Pakistani woman's life are strongly influenced by her parental family until marriage and by her husband's family thereafter. There is a negative social value attached to women's participation in economic activities that bring them into contact with men outside the family. For unmarried women, such employment diminishes their chances for marriage and thus jeopardizes their prospects of social security. For married women such employment brings shame upon the husbands and their families. With few exceptions, the norm for Pakistani households precludes women from working outside the house and constrains men from engaging in household work.

Women are active participants, however, in their household's response to the effects of economic change. On the negative side, when policy-induced changes result in the reduction of the household's real income through unemployment, wage increases that do not keep pace with inflation, or through increased costs for basic goods and services, it is women in their roles as home managers who must cope through increasing production for home consumption. In Pakistan, where indications exist that women already eat last and least, a reduction in the quality or quantity of food can be severely detrimental to women's health. Moreover, with Pakistan's high fertility rates, numerous women in poor households are likely to suffer from insufficient nutrition that may adversely affect their own health and that of their children when the quality and quantity of food is reduced.

Increases in the prices of goods and services from increases in import prices or the price increase in competing domestically produced goods may lead to increased substitution of household production for goods previously purchased or the forgoing of necessary goods and services. On the other hand, rising prices of

imported goods may open opportunities for informal, household-based production of lower cost, competing goods and services. Unfortunately, women's restriction to the household may seriously constrain their ability to respond to such opportunities.

Clearly, in Pakistan, the existing inequalities based on sex will most likely be perpetuated through the adjustment process. The major counteracting process will be increases in education and health services specifically targeted toward women and girls. Given Pakistan's record in the social sectors to date, however, it remains to be seen whether the country can even meet its current targets, no less meet its real needs. In the long run, however, the existing inequalities based on sex in Pakistan may well lead to the inability of the country to achieve its structural adjustment goals. In particular, the rapid population growth in Pakistan is reinforced and perpetuated by the extreme segregation in gender roles and the limited alternatives women have to bearing and raising children to attain social status and economic security. Unless structural changes include offering such alternatives, the rapid population growth is likely to continue unabated, seriously jeopardizing Pakistan's future development prospects.

1. Stabilization and Slowed Growth

As mentioned, the 1989-1992 stabilization program was initially expected to slow growth, not result in economic contraction. However, higher oil prices, declining remittances, and the influx of workers from the Gulf complicate Pakistan's efforts to reduce its macroeconomic imbalances without interrupting the economic expansion (oil accounted for around 13 percent of the value of imports in the late 1980s).

In countries undergoing stabilization, intensified labor force participation by women is a common response to declining real incomes (Cornia, Jolly and Stewart, 1987). But in Pakistan, women's ability to compensate for reductions in real income by intensifying income-generating activities is seriously constrained. On one hand, the range of activities to which they can turn is limited. There are very few "respectable" jobs for women in the formal labor market. Where they do exist, women's limited education, skills, and training limit their chances of being hired. When economic necessity forces women to work in "unrespectable" jobs, they work for extremely low wages under poor working conditions. Often households work as a unit with the male household head receiving the wages for the combined work of the family. In this case, women and girls engage in essentially unpaid family labor in addition to their other household and care-taking work. However, the range of activities in which women are found has been expanding over time, albeit slowly. This has in turn broadened the definition of what is considered respectable (Alavi, 1988a; Shaheed, 1990). The need to seek monetarily-remunerated work in response to stabilization-related slowdown may thus serve to continue the gradual movement of women into the paid labor force. Nonetheless, this trend may be offset by increased competition for income-earning opportunities due to return of migrant workers from the Gulf.

On the other hand, most activities women would be able to take up or intensify to counteract declining household incomes are very poorly paid. In most types of home-based work, pay is so low that even if women could significantly increase the amount of work they took in (which may not be possible with the other demands on their time), the increase in earnings would be very small. Since the products concerned occupy tiny shares of household budgets (garlands, shelled peanuts, peeled garlic, ground spices, earrings, etc.), stagnant or declining real incomes are unlikely to lower demand. But with any significant increase in the supply of women seeking monetarily-remunerated home-based work, there may be downward pressure on pay levels unless other opportunities are simultaneously opening up, i.e., through trade liberalization, as discussed below.

2. Stabilization and Spending Restraint

Many elements of the 1989-92 adjustment program affect women only indirectly because their extra-household economic ties are so intertwined with men. For example, financial reforms will have very little direct effect on women since women are generally excluded from access to credit. Job creation resulting from investment financed by private bank borrowing is likely to accrue disproportionately to men. Restraining real growth of civil servants' salaries increases pressures on middle class women to stretch scarce household resources. Slower growth of public employment may limit the already slow movement of women into low-level white collar jobs like post office clerks (Alavi, 1988a). But generally the effects on women are indirect and mediated through the relative income position of the household.

The government has made some efforts to protect vulnerable groups from the adverse effects of strict demand management and structural reforms. The sales tax base, for example, has not been extended to basic foodstuffs which are likely to remain exempt once the general sales tax replaces the present sales tax. The average increase of electricity tariffs by 15 percent contained a cross-subsidy for customers with low electricity consumption -- mainly low-income households.

The adjustment program also contains provisions for maintaining expenditure growth in education and health care. If the government is able to maintain its investment in education and health care, employment opportunities may open up for women. This, of course, depends upon how much attention is given to providing education and health care specifically for girls and women. As cultural norms constrain girls from being taught in integrated schools or by male teachers after puberty and constrain women from being examined by male doctors, there is considerable leeway for job creation for women teachers and health care professionals. Two major constraints exist: first, the limited female school enrollment and retention rates means that the supply of educated women for these positions is small; second, cultural norms interfere with women's ability to work not only because of the lack of respectable work arrangements (i.e., segregation) but also because of the lack of respectable means of transportation and housing. These constraints notwithstanding, if the government emphasizes the education of girls and the respectability of the teaching profession for women, the long-term effects may be dramatic as more girls not only complete school, but also have female role models outside of the household setting. The long-term effects of increased female employment in the health professions may also be dramatic in terms of women's health, mortality rates, and the health and well-being of their children and families.

3. Women and Supply Response

Effects of agricultural policy changes are particularly difficult to assess. This is in part because input subsidies were lifted while output prices were raised, with ambiguous effects on farm profitability. Thus, measures of agricultural incentives show no clear trend, with the possible exception of Irri rice (World Bank, 1989a: 124). At the same time, the position of women in rural production systems varies widely from region to region and between different classes (Alavi, 1988: 1328). So changes which have taken place are likely to have had case-specific effects. In poorer rainfed areas, intensification of production may increase demands on women's time at peak periods (e.g., harvesting) or in activities for which they are primarily responsible (e.g., transplanting and weeding). With the introduction of HYV crops, men of smallholder families have intensified wage employment on larger farms to supplement low incomes from their own farms. In this case, women's responsibilities on the smallholder farms may rise. In wealthier irrigated areas of the Punjab, rising incomes from the Green Revolution have increased observance of purdah. Thus, increased production on these farms

may imply decreased participation for women. In other poor areas (e.g., the Potwar area of northwest Punjab), massive departure of prime-age men -- for jobs in the army, in the Gulf, or in Britain -- have left communities inhabited by women, old men, and children (Alavi, 1988). With remittances providing the mainstay of economic support for these communities, it is unclear how they have responded to changing incentive patterns, if they have responded at all.

From available figures, employment effects of trade liberalization have probably not been dramatic. But continued expansion and improvement of the country's productive capacity should draw labor into higher productivity activities, thus increasing real incomes. Again, the main impact of trade liberalization on women is likely to be indirect. The bulk of newly-created jobs have gone and will probably continue to go to men. To the extent that job opportunities for women open up, they are likely to be in activities specifically designated as "women's work," where employers provide segregated work areas, separate sanitary facilities, and possibly female supervisors or "respectable" ways to commute (World Bank, 1989; Shaheed, 1990).

From past experience, such activities generally involve low productivity, repetitive tasks requiring little equipment, training, or education. For example, all-female workshops grew up alongside the rapidly-expanding ready-made garment industry. These workshops -- which may be either divisions of firms or separate sub-contractors -- perform such tasks as thread-cutting, embroidery, and button-stitching. Increased production for export may also create some opportunities for home-based work. But this is likely to be confined to marginal, low-productivity tasks like packing since factory conditions are generally required to achieve the standardization and product quality needed for competitiveness in export markets. Whether based inside or outside the home, most export-related work opportunities for women will probably continue to involve very low pay and little chance for skill acquisition or occupational advancement.

To date, most home-based activities -- while addressing concerns about women's respectability -- center on minor, non-traded goods unlikely to be affected one way or the other by trade liberalization (garlands, shelled peanuts, etc.). Any increases in import prices could potentially open entrepreneurial opportunities for home-based production for the domestic market. Cultural norms and women's limited access to inputs, information, and markets seriously constrain their ability to respond to newly-created opportunities. In the predominant arrangement for home-based production, women depend on the males in their family for interactions with the outside world or middlemen to provide materials and market access. There are some instances in which women's activities have been organized to address the special needs of women while overcoming the need to go through men. For example, there are cases of women micro-entrepreneurs and women's cooperatives successfully organizing input procurement and distribution to home-based workers and collecting and marketing output (World Bank, 1989). Also, in the past few years, a handful of women have been able to enter the Juma Bazaars (Friday markets) in Karachi, where they sell spices, vegetables, children's garments, toys, and women's clothing. However, an important problem facing women's cooperatives has been limited demand for the products they produce, since the latter are often confined to low-value, poorly-designed handicrafts for which the market may be saturated (World Bank, 1989: 99).

Quantitatively, the most important benefits to women from trade liberalization may be indirect, insofar as creation of productive employment for men raises household incomes. Traditionally, with rising real incomes, women are apt to withdraw from the labor market. There is some debate as to whether this tendency has been gradually weakening over time, at least in urban areas (Alavi, 1988; Shaheed, 1990). On one hand, it is frequently argued that the cultural ideal of keeping women out of monetarily-remunerated work has become increasingly unattainable due to urbanization, weakening of traditional extended family networks, and the general

monetization of production and consumption. Thus, while some women report benefits of working besides the income it brings -- greater self-confidence and respect from family and neighbors -- most mention disadvantages, including trouble juggling work with domestic responsibilities, reduced leisure time, and conflict with family and society over their dual roles (Shaheed, 1990). On the other hand, some observers suggest that the increase in women's labor force participation has expanded the range of options available to them, so that it is no longer obvious that purdah is the chosen path for all but the tiny educated elite. In any event, changes in the role of women in Pakistani society and economy are the result of complex, longer-run processes. While trade liberalization may contribute to these processes, its effect is ambiguous and by itself unlikely to be of major importance.

I. INTRODUCTION

This study reviews what we know and do not know about gender and economic adjustment in the neighboring west African countries of Ghana and Côte d'Ivoire. Is gender an important dimension along which to analyze the distributional consequences of economic adjustment in these two countries? If it is an important dimension along which to disaggregate, how important is it relative to other disaggregations, for instance, geographical location, occupational status, and sectoral location?

Economic adjustment is the process whereby a country seeks to remove internal (domestic budget) and external (balance of payments) financial disequilibria in an attempt to provide a stable backdrop against which resource reallocation can take place; markets are liberated; and resources are induced into sectors according to unfettered world and domestic prices. The preceding stabilization policies (the term "economic adjustment" is usually used to embrace both "stabilization" and "structural adjustment") involve large reductions in government expenditures (removal of subsidies, introduction of user fees, reduction in the number of government employees) and expenditure switching out of the non-traded sectors into the export and unprotected import sectors.

The questions relevant to gender are (1) do the demand-side stabilization policies increase burdens differentially according to gender and, if so, how? and (2) do women find themselves disproportionately in sectors that, due to supply-side policies, require resource mobility and, if so, is there a differential mobility according to gender?

In general, the literature has divided itself along these two lines; the "adjustment with a human face" literature concerns itself mainly with examining whether women are "victims" of adjustment, while another strand of literature accentuates the other side of the coin and tries to give us some idea of the opportunity cost of prevailing gender attitudes by treating them as brakes on the adjustment process.

In order to fully answer these questions, it is important to look at the gender division of responsibilities both within and outside the extended household setting; once we have a better idea of this division, we can attempt to map the effects of adjustment policies onto different groups. A review of the role of women in Ghana and Côte d'Ivoire will quickly reveal a large variety of task-allocations by gender over time, space, and culture. Similarly complex are the adjustment packages of both Ghana and Côte d'Ivoire which cannot be characterized as a neat sequencing of discrete policy changes. Enormous methodological problems remain to be confronted in the untangling of the effects of the adjustment policies from the effects of the crisis that precipitated adjustment in the first place. In addition, there is the question of the counterfactual situation; what would the picture be like if adjustment had not taken place? A number of individuals have argued that because pre-adjustment distortions inevitably worked to the benefit of those in positions of power, the removal of these distortions can only benefit the most vulnerable; of course, providing worse distortions are not imposed instead.

Empirical analyses of household surveys to date have not directly tackled the mapping of complex patterns of gender task responsibilities onto complex patterns of macroeconomic policy changes. Instead, the analyses have either combined analyses of the current living standards and responsibility patterns of women vis-à-vis men to examine gender differentials in the ability to cope with the extra burdens generated by the adjustment process, or they have combined analyses of the gender composition of occupational sectors that are likely to require resource mobility and the mobility of labor by gender, to examine the extent to which gender differentials might act as a brake on adjustment.

These empirical analyses have relied for the most part on multi-purpose, nationally-representative household surveys conducted by the Living Standards Survey (LSS) unit and the Social Dimensions of Adjustment (SDA) unit of the World Bank. These household surveys are conducted on an annual basis, and were initiated in 1985 for Côte d'Ivoire (CILSS) and in 1987 for Ghana (GLSS). A review of studies based on these data reveals the strengths and weaknesses of multi-purpose surveys--a wide span of information but not enough depth at crucial locations for an all-embracing gender analysis.

The outline of this study is as implied above. Section II compares and contrasts the very different pre-adjustment experiences of Ghana and Côte d'Ivoire and the accompanying policy responses.

Section III begins by describing welfare levels by gender and gender of household head because this underpins most of the subsequent analysis. There is evidence that female-headed households (both actual and self-reported) are poorer (in terms of monetary indicators) than their male counterparts, but the evidence is mixed. Gender-differentiated processes (education, reproduction, time burdens, and intergenerational occupational patterns) are examined, with educational patterns demonstrating poor role model definitions for females in both Ghana and Côte d'Ivoire in terms of access to, and mobility of, resources. It is difficult to examine resource mobility for Côte d'Ivoire because of data gaps, and, for Ghana, the data are not as well-defined as they could be. Nevertheless, it seems that women are situated mostly in nontraded/protected sectors (food agriculture) that will need to provide resources for other traded/unprotected sectors (export cropping, manufacturing) during the course of adjustment. If women need to be more mobile than men, it is clear from preliminary analyses that they are not. The factor that deprives them of equal mobility with men is education. Women in the waged labor market actually earn a premium over men with similar characteristics, but it is entry into the labor market where barriers appear decisive.

Section IV provides a discussion and some conclusions as to some of the issues raised in the preceding sections, and possible policy consequences thereof. Differences in living standards seem greater between countries as opposed to across-gender differences within countries, although for labor mobility, location, and access to resources, the reverse seems true. Clearly, successful adjustment will require mobility of female labor, and this will require higher educational achievement for women as well as lower time burdens, but whether this emphasis should be generated through targeted resources to women or through more general poverty alleviation with perhaps some specific policies attached to education, is an open question.

Appendix I describes the type of data available in the World Bank Living Standards Surveys together with their limitations for the purposes of gender analyses. The two surveys are almost identical for Ghana and Côte d'Ivoire, ranging from income and expenditure to anthropometric information, but for the purposes of gender analyses the level of disaggregation is frustrating; for instance, no record can be made of individual income sources as there is no record of individual labor hours allocated to specific crops grown on the family's land.

II. ECONOMIC ADJUSTMENT AND POVERTY IN GHANA AND COTE D'IVOIRE

The preceding section explains how complex an analysis of gender and adjustment can become and suggests areas in which an analysis should focus: the sectoral allocation of female labor, the mobility of female labor, the ability of women to gain access to credit and savings, and the living standards and time burdens of women. All this may seem to suggest that the specific nature of a particular country's stabilization and adjustment is irrelevant, but this is not a valid implication.

This section will show that for two countries, Ghana and Côte d'Ivoire, different gender-differentiated impacts on, and requirements of, individuals will occur as a result of the very different macroeconomic policy frameworks in which the two governments operate and the different patterns of poverty. Appleton and Collier (1990) characterize the situation by stating that Côte d'Ivoire is a member of the Franc Zone, a complex system of budgetary, monetary, and exchange rate rules and privileges whereas the government of Ghana had an autonomous macroeconomic policy which evolved into an ad hoc bargaining relationship with the World Bank and the IMF.

A. Historical Background

In 1957 Ghana was the first African colony to proclaim independence. Côte d'Ivoire proclaimed independence from France in 1960. In 1957 the leaders of Ghana and Côte d'Ivoire are reported as having engaged in a wager contrasting the new development paths the two countries were on the threshold of embarking upon. Zartman and Delgado (1984) describe the situation: "Félix Houphouet-Boigny of Ivory Coast bet Kwame Nkrumah of Ghana that an evolutionary and cooperative future in collaboration with the French colonial ruler would in ten years yield a better life for the Ivorians than the total rupture and independent option of Nkrumah would provide for the Ghanaians." By the end of the decade, the Ghanaian economy was beginning a long decline, while the Ivorian economy was embarking on its "economic miracle" of the 1970s and early 1980s. A reflection of, and a contributor to the Ivorian economy's performance was the stability in policies and political leadership from 1957 until the early 1980s. Also contributing to this stability was the strong leadership of Houphouet-Boigny and an expanded middle class which bridged ethnic divisions. Finally, and most crucially for this stability to be flexible and responsive, Côte d'Ivoire has had a favored position in the Franc Zone (Zartman and Delgado, 1984). As well as being heavily influenced by France, Côte d'Ivoire has served as a conduit for French influence throughout francophone Africa, binding it ever more tightly to French economic and political interests.

Although Ghana's export-led economy was growing rapidly around the time of independence, worsening terms of trade, bottlenecks in food production, investment in low-return projects, and increasing corruption led to declining personal incomes and the military coup of 1966. Economic mismanagement, or simply a lack of economic policy, continued to be reflected by a turbulent political situation. The 1966-69 military regime was replaced with a series of regimes: civilian, 1969-72; military (First Rawlings Government), 1973-79; civilian, 1979-81; and military, 1981-date (Second Rawlings Government).

It is clear that unlike many countries grappling with structural adjustment in accordance with a new set of relative prices that are largely the result of some exogenous economic forces, Ghana's economic decline can be traced back to the early 1960s. This decline has been one of domestic policy shortcomings exacerbating the

effects of external shocks (declining terms of trade and drought). However, since both these shocks were also experienced by Côte d'Ivoire with less of a decline in living standards, we need to look at domestic policy responses.

The most striking policy miscalculation appears to have been the overvaluation of the Ghanaian cedi in the 1970s, by far the highest currency appreciation rate in sub-Saharan Africa (Commander, 1989). This policy, combined with the implicit taxes levied on cocoa--the mainstay of foreign exchange earnings--resulted in a drastic decline in agricultural export earnings. In 1982 cocoa farmers were receiving 17 percent of the 1960/63 price in real terms; Ghana's international market share in cocoa fell from 36 percent in the mid-1960s to 17 percent in the early 1980s; and, in Ghana's neighboring countries cocoa prices were twice as high as the domestic price resulting in 8-12 percent of Ghanaian cocoa being marketed outside of Ghana throughout the 1970s (Commander, 1989). The introduction of a fixed exchange rate regime in the mid-1970s made things worse as the domestic money supply was increased to finance the budget deficit, and this led to inflation rates in the region of 80 percent in the late 1970s/early 1980s. Real per capita national income fell by 30 percent between 1970 and 1982.

B. Tracing Gender Perspectives

There is little doubt that women have long played a important economic role in west Africa, especially in the production of food and trading, as well as non-marketed production activities inside the home. In the 1940s, when a Tikar woman of west Cameroon was asked why women were mourned for four days and men for only three, she replied, "A woman is an important thing. A man is a worthless thing indeed, because a woman gives birth to the people of the country. What work can a man do? A woman bears a child, then takes a hoe, goes to the field, and is working there; she feeds the child [with the work] there. A man only buys palm oil. Men only build houses" (Bryson, 1980). The literature documenting historical trends in the role of women in west Africa (see Bryson, 1980 for a good review) emphasizes the gender impacts of colonialization, urbanization, and deforestation.

Colonialization in the early twentieth century did not lead to a reduced role for women in food production, in fact just the opposite. Colonial rule led to male labor moving into new roles, a male bias in education, and the promotion of cash-crop production among males. Urbanization and the development of non-agricultural sectors placed the burden of increasing food production upon women and also provided them with income sources from the sale of food crops. This led to increased female time burdens because production increases are generated mainly from increased labor inputs rather than the increased application of complementary inputs or improvements in technology.

Time burdens have also increased due to deforestation. McGuire and Popkin (1988) note the dangers of women becoming involved in a zero-sum game in which time or energy devoted to any new effort must be diverted from other activities. For instance, in a low agricultural productivity setting, meeting household basic needs may entail the clearing of new land. The subsequent deforestation may, however, increase the time allocated by women to collect fuel, which could lead to less time for female agricultural input, which could lead to less calories from this income source, which, in turn, could lead to more deforestation.

C. Economic Adjustment

A few basic indicators for Ghana and Côte d'Ivoire are presented in Table 3.1. The Ivorian economy is ranked among the "lower middle-income countries" by the World Bank, while Ghana is classified as a "low-income country." Most of the economic indicators are more favorable for Côte d'Ivoire with the exception of education enrollment and population growth (higher crude birth rate). This current relative standing is a reflection of the two very different experiences described at the beginning of this section.

Against different macroeconomic backdrops, but with similar levels of economic activity across gender, Côte d'Ivoire initiated its adjustment process in 1981, as did Ghana in 1983.

Ghana's economic adjustment refers to the Ghanaian government's initiation of the Economic Recovery Programmes I (the stabilization phase in 1983-86) and II (the adjustment phase from 1987 onwards) with pronounced support from external donors (indeed, it is difficult to separate the effects of the adjustment policies from the resource influx they precipitate). The World Bank's Western Africa Region gray-covers (1987a, 1989b) are a good reference source for recent adjustment policies. The number of analyses related to Ghana's economic adjustment is large. The most recent and high-profile of these include: Green (1987), Roe (1989), Commander et al. (1989), Tabatabai (1986), World Bank (1987, 1989), Green (1987), Mink (1989), Rimmer (1988), Manarolla and Vordzargbe (1987), UNICEF (undated), Haddad (1990), and Younger (1989). The Ghanaian economic experience has been so distinct in the pre- and post-1983 period that most researchers have found it convenient and illuminating to divide their discussion along these lines. Indeed, the severity of the pre-1983 decline in living standards and output (both total and per capita) has led several writers to characterize stabilization and adjustment as a success simply because it halted the long decline in Ghana's economic fortunes.

The severity of the Ghanaian economy's decline leads Roe (1989) to state: "in Ghana, structural adjustment was more to do with putting a floor under the process of long-term decline: a process which was unequivocally damaging to many economic interests." A counterfactual scenario of continuing economic decline in the absence of adjustment is implied by Roe's analysis, and he speculates that "the future of almost all groups in the economy must look just a little brighter." Norton (1988) and Tabatabai (1986) implicitly concur with this floor installation argument in that general conditions were so poor during the pre-adjustment period, that, apart from the retrenched urban workers, it is difficult to identify, before the fact, any particular group that has or will suffer heavily as a consequence of adjustment policies.

Côte d'Ivoire's economic adjustment program has been supported by three World Bank Structural Adjustment Loans (SALs), in 1981, 1983, and 1986. The earlier initiation of adjustment programs in Côte d'Ivoire, as compared to Ghana, has led some commentators to classify the 1980s as Côte d'Ivoire's "Decade of Adjustment" and the 1990s as its "Decade of Adjustment with Equity" (Grootaert and Kanbur, 1990).

Compared to Ghana, the number of studies of Côte d'Ivoire's adjustment seem to be slightly less numerous and include: Hood et al., (1988), Glewwe and de Tray (1988), Kanbur (1990), and Grootaert and Kanbur (1990). Nevertheless, the number of human resource studies using the Côte d'Ivoire Living Standards Measurement Survey (LSMS) data has grown enormously (Deaton, 1989; Sahn, 1990; Dor and van der Gaag, 1988; Gertler et al., 1988; Komenan and Grootaert, 1988; van der Gaag and Vijverberg, 1988; Strauss, 1990; Haddad and Hoddinott, 1990; Deaton and Benjamin, 1987; Horsnall, 1990; Collier and Horsnall, 1989; van der Gaag, Stelcner, and Vijverberg, 1989; and Levy and Newman, 1989) and has provided many results which will be drawn upon in Section III of this report.

TABLE 3.1: GHANA; COTE D'IVOIRE

SELECTED INDICATORS FOR GHANA AND COTE D'IVOIRE

Indicator	Ghana	Côte d' Ivoire
GNP/capita (1988$)	400	770
GNP/capita average annual growth rate 1965-88 (%)	-1.6	0.9
Value added in agriculture (millions of current 1988$)	2577	2728
Agricultural production, average annual growth rate, 1980-88 (%)	0.5	1.6
Cereal imports, 1988 ('000 metric tons)	228	494
Food as a share of total household consumption (%)	50	40
Food as a share of merchandise imports, 1988 (%)	8	18
Population growth, average annual growth rate (%), 1980-88	3.4	4.0
Population (millions)	14	11
Crude birth rate per '000 population, 1988	45	50
Daily calorie supply per capita, 1988	1759	2562
Primary education, % of female age group enrolled, 1987	63	58
Secondary education, % of female age group enrolled, 1987	32	12
Urban population as a % of total, 1988	33	45

SOURCE: WORLD BANK DEVELOPMENT REVIEW, 1990.

Côte d'Ivoire's pre-adjustment experience has been much more mixed than has Ghana's. Joekes et al. (1988) provide a good summary of this period:

> between 1975 and 1977 Côte d'Ivoire experienced the benefits of the 'Beverage Boom', a period in which there was a substantial increase in the world prices of coffee and cocoa. The terms of trade became positive and the government used the increased revenues to launch a series of investment projects. The increase in investment resulted in an increase in imports, and neither the high levels of investment nor the increased imports were scaled back when the world prices for Côte d'Ivoire's exports collapsed. Government expenditure increased and the resulting deficit was financed by heavy foreign borrowing.

1. Some Macroeconomic Questions

The three-sector model used to analyze the sectoral effects of adjustment (non-tradables, exports, and import substitutes) provides an indication, under ideal conditions (existence of efficient markets, resource mobility, actual changes in relative prices, etc.), of the resource flows induced by the core of any adjustment package--an attempt to depreciate the real exchange rate through nominal exchange rate devaluation. Under an overvalued nominal exchange rate, the demand for foreign exchange will outstrip the ability of the export sector to generate it. At the two extremes, governments either have to ration foreign exchange (import tariffs and quotas) or borrow in international financial markets. If import restriction is the prime policy choice, the incentive to produce import substitutes and non-tradables that substitute for imports is large, and resources are drawn into these sectors. Import-substitute production is thus a protected sector, and a devaluation brings the price of imports evaluated at the exchange rate up to that of import substitutes, while raising the domestic price of exportables. Resources are subsequently drawn into the unprotected traded sector. If foreign borrowing is the primary policy tool, import substitutes are not protected, and a devaluation will permit their domestic price to be raised along with the domestic price of exportables. In this case, resources will move out of the non-traded sector into the unprotected traded sectors (import substitutes and exports) as a result of the devaluation. For the gender analysis we need to know:

Demand-side policies	Supply-side policies
(1) Has there been a reduction in government services?	(4) Has a nominal devaluation led to a real devaluation?
(2) Does it have the potential to affect men and women differently?	(5) Which sectors are classified as protected/unprotected?
(3) Are women more vulnerable?	(6) What is the female representation in these sectors?
	(7) Is female labor less mobile?

Section III spends considerable time attempting to answer questions 3, 6, and 7 which are directly related to gender. This section briefly addresses the more general questions 1, 2, 4, and 5 that relate to adjustment and trade policy.

(1) Has there been a reduction in government services and does it have the potential to affect men and women differently?

In Ghana, the decade prior to stabilization saw such a severe deterioration in infrastructure as revenues vanished, stabilization probably established a floor below which services could not be reduced. Basic service access had declined due to the non-policies of the 1972-81 period. Expenditures on education and health declined sharply post-adjustment in Côte d'Ivoire, too, but these were largely achieved in ways that should minimize impacts on the poor. For instance, resources were transferred from higher education levels to primary levels, user fees were charged for medical visits, and emphasis was placed on training more nurses relative to doctors. Clearly all these changes will hit the middle-income groups the hardest. It is these groups who pursue higher education and seek health care facilities with doctors rather than nurses.

As to the gender effects of such a set of policies, a number of considerations come into play. The next section will suggest that women have a higher representation in poorer groups than do men; this is one factor making them less affected by these types of reductions in public service provision. On the other hand, women have a general responsibility in the household for the education and health status of children and other family members: a factor that might increase their vulnerability to reductions in service provision.

(2) Has nominal devaluation led to real devaluation?

Has the price of tradables risen relative to the price of non-tradables? For Côte d'Ivoire, Blundell et al. (1990) use CILSS data to construct regional price change indices for gross production and cash-crop production over the 1985-86 period. The two indices show rises in real prices for both the overall category and the cash crop category, but with a change in the former that is ten times the change in the latter. Clearly, there has been an increase in the relative prices of subsistence crops (i.e., a continuing overvaluation of the real exchange rate)--the opposite of what is necessary for successful adjustment. For Ghana, Alderman (1990a) notes that post-1983 nominal devaluations have led to real devaluations due to a "fighting off" of any subsequent inflation with further devaluations.

(3) Which sectors can be classified as protected/unprotected?

Clearly, cocoa and coffee production in the two countries are exportables and are subject to world prices and thus unprotected. In fact, this sector has been taxed, very heavily in Ghana and less so in Côte d'Ivoire. In Côte d'Ivoire export-crop incentives have been maintained mainly through non-price mechanisms such as extension, technological improvements, and good infrastructure (Zartman and Delgado, 1984).

Is food a non-tradable/protected import substitute, export/unprotected import substitute, or both? This is important because it has consequences for the mobility of female resources. At the aggregate level, Appleton and Collier (1990) seem to implicitly classify food production in both countries as an important non-tradable. Ideally, we would like to be able to further refine the analysis and classify all the main staples into two groups: protected importables/non-tradables and unprotected importables/exportables. Adjustment will result in resources being transferred out of production of the former group into the latter. This type of classification of the main foods in Ghana and Côte d'Ivoire would entail a review of the food production and distribution systems of both countries, and is beyond the scope of this paper. However, since rice is the main staple food crop in which both the Ivorian and Ghanaian governments have historically intervened, it is worth highlighting in this context.

Rice is the principal grain produced and consumed in Côte d'Ivoire. Output prices have been supported and non-price inducements to grow rice initiated. At the moment, producer prices are above consumer prices in a continued attempt to increase production. The main adjustment-related subsidy removal in the production of rice is for irrigated rice, which accounts for approximately 5 percent of land devoted to rice in Côte d'Ivoire. Since irrigated cultivation is likely dominated by male farmers, the effects favor women. In addition, the third SAL (1986) for Côte d'Ivoire states "international prices will be increasingly taken into account in setting prices for rice" (Kanbur, 1990). The intent to bring domestic prices in line with international prices signals an eventual inducement of resources out of protected rice production despite the non-price inducements to growers. Classification of rice in Côte d'Ivoire as a protected importable/non-tradable seems justified.

Rice is a much less important crop in Ghana than in Côte d'Ivoire. Although late 1980s rice production figures have recovered from the 1983 nadir to early 1970s levels, rice still accounts for only 1-3 percent of the budget share of households in rural areas and 2-4 percent for households in urban areas. In general, Ghanaian government intervention in food crop output markets is described as "benign and likely ineffective" (Alderman, 1990a). Both Alderman (1990a) and Tabatabai (1986) note the minor role played by the state trading company, Ghana Food Distribution Company, in the sale of marketed output. Indeed, the 1989 World Bank Ghana: Structural Adjustment for Growth document does not even mention food crops under the heading of "Implementation of Structural Adjustment Policies 1987-88," but focuses entirely on cocoa. Government intervention in rice is restricted mainly to production in the north of the country, but even here market integration has been shown to be poor (Alderman, 1990b). In other words, rice produced in Ghana and imported rice are seen by consumers as two distinct products. Rice in Ghana can be described as a non-tradable/failed import substitute.

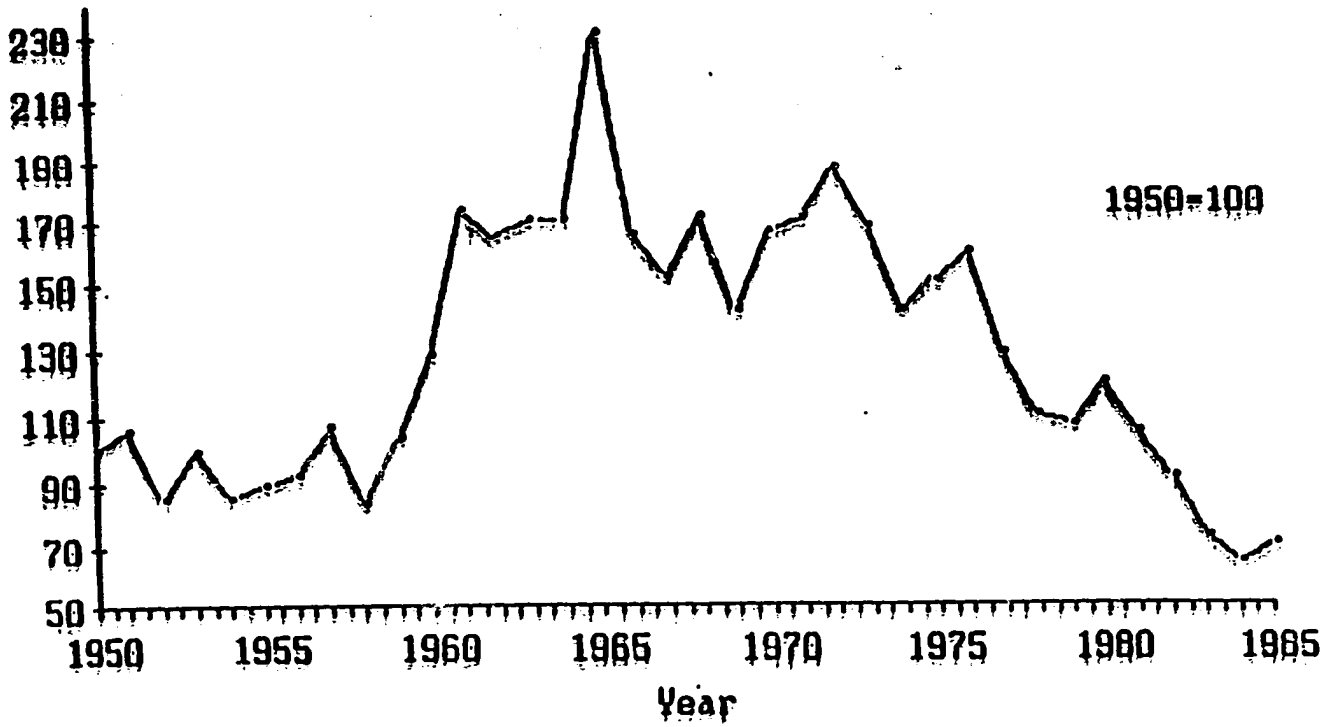
An unprotected import substitute role for food in urban markets is suggested in addition by Ardayfio's work on food marketing in Ghana. Ardayfio (1985) cites transport systems between the north and south of Ghana as a crucial bottleneck to the regular flow of food from the rural to the urban markets. Although these problems are reported as less severe in the two main markets, Accra and Kumasi, for traders in other smaller urban markets such as coastal Sekondi and Koforidua (approximately 60 km. north of Accra), transport supply problems pose a severe constraint.

In summary, it seems reasonable to regard food in both countries as both a non-tradable in the rural areas, and an unprotected import substitute in the urban areas. Thus, both female labor mobility and access to new resources are likely to be important for successful adjustment.

2. Living Standards, Aggregate Output, Shocks, and Policies

Much of the next two sub-sections draws on Appleton and Collier (1990), which seems to be the first in-depth comparison of the Ghanaian and Ivorian macroeconomies during their adjustment phases. They have grappled with data-consistency problems (e.g., for Ghana national account figures, UN and government figures differ widely) and have come up with several cross-country data series that merit discussion (see Appendix II for notes on the data series definitions). The down-side to using their series is that by using 1978 as the base year, the recovery for Ghana looks more impressive than it really is. For instance, Figure 3.1 shows trends in cocoa production, the engine of Ghanaian economic growth. Cocoa output in the 1960s was 2-3 times as high as in the 1980s. For Ghana, the evidence on production gains at this early stage in the adjustment process

FIGURE 3.1: GHANA
TRENDS IN COCOA OUTPUT, 1950-1985



SOURCE: TABATABAI (1986).

suggests they have been made by retracing steps, reutilizing capacity, and rehabilitating existing utilities (Roe, 1989); indeed, much of the gain was due to improved weather conditions post-1983. Thus, it is too early to say whether future increases in production in either country will require fundamental changes in gender attitudes.

Figure 3.2 presents real per capita private and public consumption figures for both countries over the period 1978-87, Figure 3.3 presents figures on earnings relative to per capita private consumption, and Figure 3.4 presents figures for GDP in 1978 prices (1978=100). Figure 3.2 shows the fairly steady falls in both private and public per capita consumption in Côte d'Ivoire over this period, while for Ghana in 1981, private consumption falls to a nadir of 53 percent of its 1978 level and then begins to rise after 1984 although in 1987 it is still only at 75 percent of its 1978 level. Figure 3.3 gives some idea of the rural-urban distribution of welfare by comparing urban wage earnings to per capita private consumption averaged over the whole population. In Côte d'Ivoire the series shows an upward trend indicating that the urban sector has done relatively better than the rural sector, while for Ghana, it seems as if the urban sector fared worse in the pre-1983 period, but recovered (relative to the rural sector) in the post-stabilization period. From Figure 3.4, it can be calculated that over the 1978-86 period, real GDP (not per capita GDP) in Côte d'Ivoire is on average 9 percent higher than in 1978, while for Ghana the corresponding average figure is -6 percent.

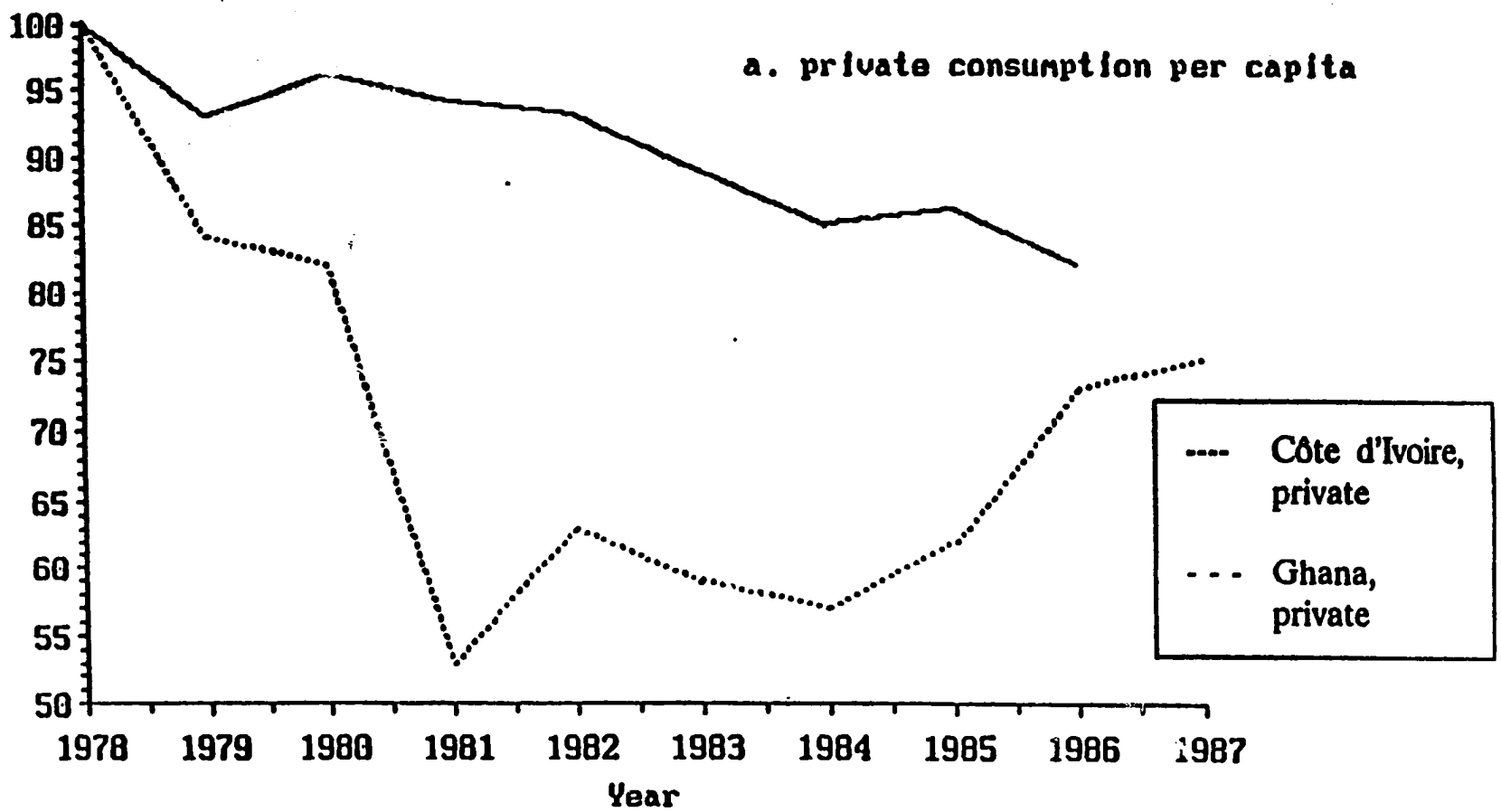
Changes in the composition of output for the two countries over this period are presented in Table 3.2 and are fairly typical of countries undergoing adjustment. Non-tradables (food and livestock) hold firm in both countries with the exception of the period of the 1983 drought, while agricultural tradables (cocoa and coffee) do well in Côte d'Ivoire over the whole period, but poorly in Ghana pre-1983, although they recover weakly post-1983. Urban tradables (manufacturing) collapse in Ghana pre-1983, but make a reasonable recovery after that, whereas in Côte d'Ivoire over the whole period they hold their production at a level approximately 8 percent above their 1978 level.

Shocks experienced by the two countries include declining terms of trade, the 1983 drought (which affected the Ivorian economy mainly through the loss of hydroelectric power generation), rising real interest rates in the early 1980s, and in Ghana, the 1983 return of 1.2 million emigrant workers from Nigeria. The terms of trade deterioration was worse for Ghana than for Côte d'Ivoire, but because Côte d'Ivoire's exports accounted for a higher share of GDP, Ivorian income loss was greater relative to the counterfactual than in Ghana. Appleton and Collier calculate the discounted income losses (i.e., income that would have been earned had the terms of trade been maintained at their (high) 1978 levels) over the 1979-86 period as 52 percent and 25 percent of the 1978 real incomes of Côte d'Ivoire and Ghana, respectively.

The main difference between the two countries' response to the early 1980s shocks seems to stem from the membership/non-membership in the West African Monetary Union (WAMU) -- Union Monétaire Ouest Africaine (UMOA). The tradeoffs involved in Côte d'Ivoire's membership in the WAMU seem to have netted out in a very beneficial way. Balanced against the loss of sovereignty in the setting of monetary (centrally-fixed interest rates and reserve requirements) and exchange rate (pegging of the CFA franc with the French franc) policies, is the benefit of having a fully convertible currency (with the French franc). In this way, Côte d'Ivoire could sustain an external imbalance in a way that Ghana could not--hence their different policy responses to shocks.

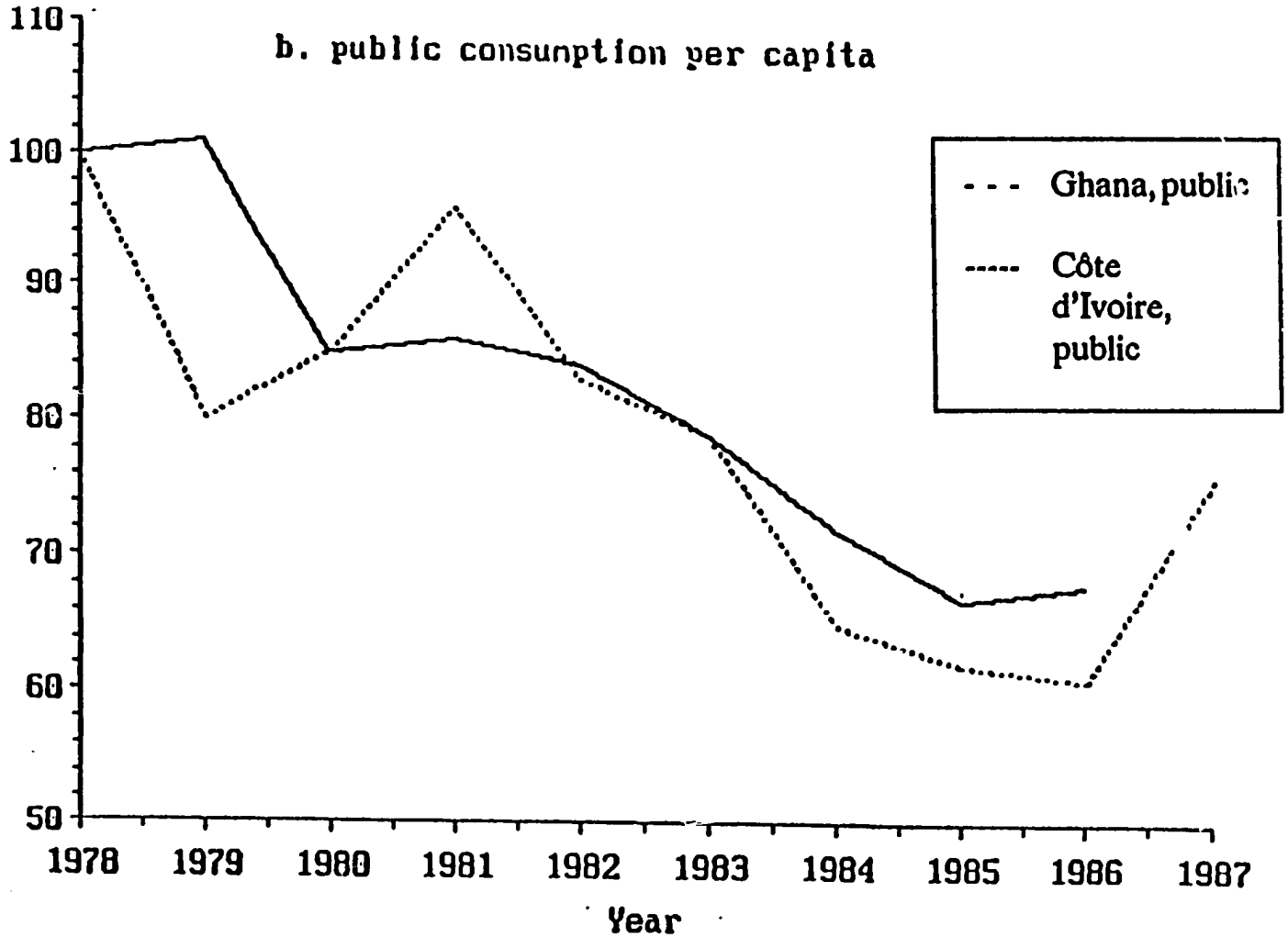
At this time, Ghana increased import restrictions to reduce the need for foreign exchange (cocoa export volumes were declining as well as cocoa export prices), and raised the money supply to help finance the budget deficit. The rapid inflation this led to simply eroded the all-important returns to export cropping, and the

FIGURE 3.2: GHANA AND COTE D'IVOIRE REAL CONSUMPTION PER CAPITA



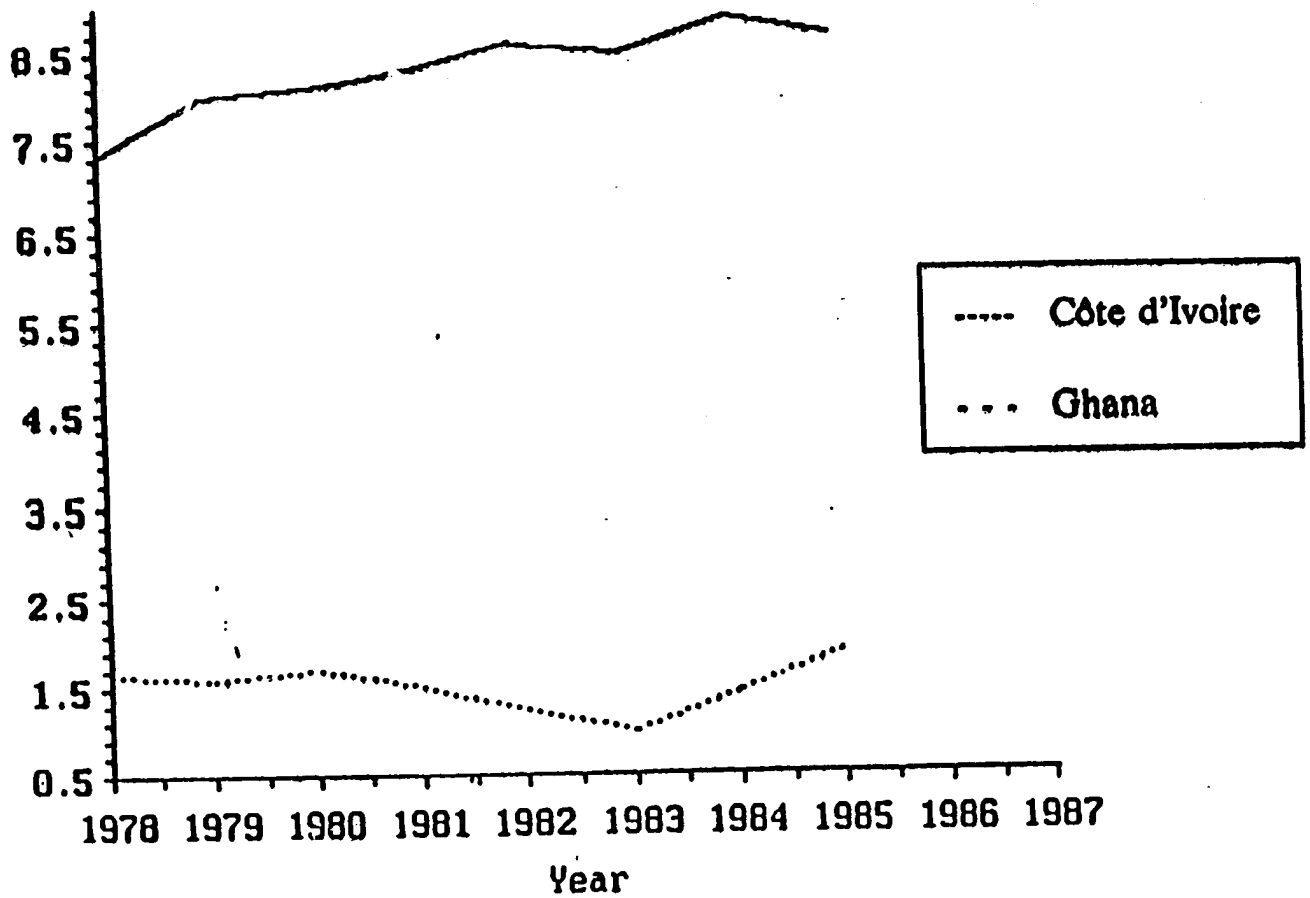
SOURCE: APPLETON AND COLLIER (1990).

FIGURE 3.2: GHANA AND COTE D'IVOIRE
REAL CONSUMPTION PER CAPITA



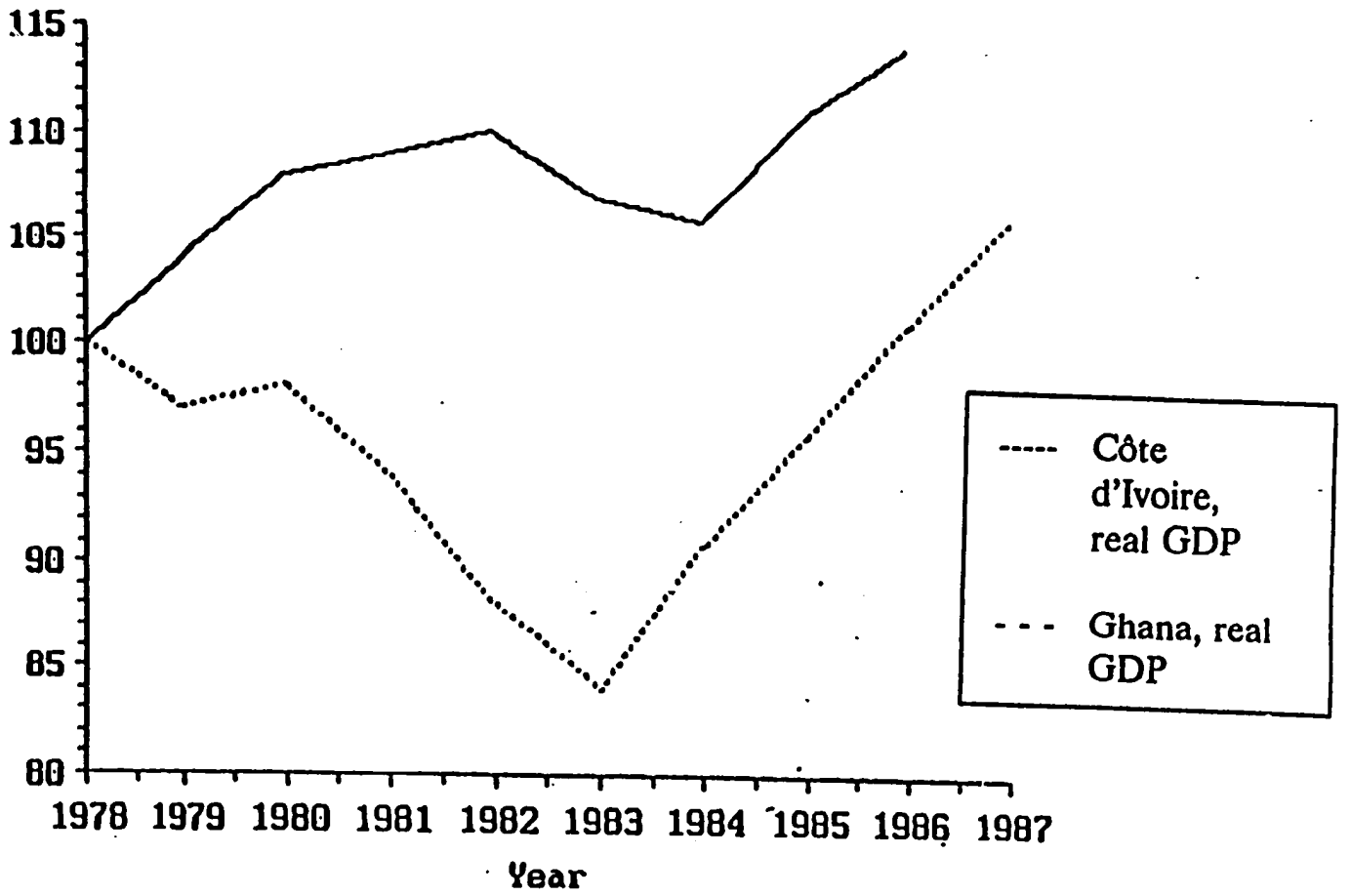
SOURCE: APPLETON AND COLLIER (1990).

FIGURE 3.3: GHANA AND COTE D'IVOIRE EARNINGS RELATIVE TO PER CAPITA PRIVATE CONSUMPTION



SOURCE: APPLETON AND COLLIER (1990).

FIGURE 3.4: GHANA AND COTE D'IVOIRE
CONSTANT PRICE GDP



SOURCE: APPLETON AND COLLIER (1990).

TABLE 3.2: GHANA; COTE D'IVOIRE

OUTPUT MOVEMENTS BY SECTOR, 1978-87

■ Ghana

Year	GDP	Exports	Cocoa	Manufac-turing	Gov't. Services	Agri-culture (All)	Food and Livestock	Distri-bution	Residual Non-Tradable Sectors
1978	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1979	97.5	98.3	93.3	83.2	83.1	103.8	108.3	103.6	97.7
1980	97.9	84.9	105.3	82.0	85.9	106.0	108.4	94.6	97.5
1981	94.5	77.4	96.3	66.2	91.3	103.3	107.5	92.7	97.0
1982	88.0	89.2	83.9	52.7	88.2	97.7	102.9	83.2	95.8
1983	84.0	48.4	66.4	46.8	93.2	90.9	94.7	78.7	96.5
1984	91.2	53.0	59.3	52.8	94.4	99.7	109.3	86.7	105.1
1985	95.9	56.4	65.3	65.6	100.1	100.3	107.3	98.6	109.4
1986	100.8	79.9	81.7	72.9	104.3	103.6	107.5	107.5	115.3
1987	105.7	99.0	85.1	80.2	109.6	103.7	107.1	126.4	125.2

■ Côte d'Ivoire

Year	GDP	Exports	Cocoa	Manufac-turing	Gov't. Services	Agri-culture (All)	Food and Livestock	Distri-bution	Residual Non-Tradable sectors
1978	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1979	103.8	102.9	92.1	105.5	106.8	101.4	108.4	102.1	104.3
1980	108.0	114.2	102.5	115.1	113.7	108.9	116.0	104.1	101.4
1981	109.2	122.7	139.3	116.2	115.2	117.5	119.3	103.3	89.8
1982	110.2	129.4	125.7	117.4	119.8	117.7	118.5	106.9	85.9
1983	107.4	122.2	106.6	110.4	121.9	120.1	121.8	98.7	79.0
1984	106.6	120.6	131.7	111.6	120.3	120.8	136.1	96.3	76.4
1985	111.2	124.8	137.1	108.6	120.8	132.5	137.8	99.8	77.2
1986	114.5	120.1	n.a.	109.8	125.9	137.2	n.a.	101.4	79.8

SOURCE: APPLETON AND COLLIER (1990).

economy entered a downward spiral. Côte d'Ivoire, on the other hand, needed only to worry about how to balance the internal, or domestic, budget with less room in which to maneuver due to the WAMU. For instance, one of the WAMU's rules is to limit central government borrowing to 20 percent of the previous year's revenue. Appleton and Collier report that this was a binding constraint for the Ivorian economy in the early 1980s, and the policy response was to freeze public sector spending.

The Ivorian access to the French capital market actually allowed it to liberalize its tariff system and provide tax incentives to stimulate the export sector. Appleton and Collier suggest that the Ghanaian government's realization that the maintenance of cocoa farmers' incomes (for the economy to break out of its downward spiral) was fiscally unsustainable, and was an important catalyst for the 1983 shift in policy regimes. The shock 89 percent devaluation of the cedi in 1983 was the prelude to a number of smaller devaluations, and by 1987 the cedi averaged only 1.7 percent of its 1982 official value in CFA francs. In addition, Ghanaian government public spending was reduced as a percentage of GDP to fight the inflationary consequences of the devaluations, and restore internal balance. For a more detailed description of specific adjustment packages, the reader is referred to Roe (1989) for Ghana, and Grootaert and Kanbur (1990) for Côte d'Ivoire.

3. Relative Price Changes and Distributional Impacts

Tables 3.3-3.5 show the relative price changes occurring in Ghana and Côte d'Ivoire over the 1978-87 period. An examination of the distributional consequences of these relative price changes is made complex by the multi-occupational nature of most households' work activity. In an attempt to derive a meaningful household occupational classification upon which to cast these relative price changes, Appleton and Collier use LSMS household-level data for Côte d'Ivoire and SDA data for Ghana to divide households into 6 different labor groups. These groups are listed in Table 3.6 as: beverage crop farmers, non-beverage farmers (mostly food), households with one or more household members in: wage employment in manufacturing, retail or wholesale trading, wage employment in government service, and wage employment in residual non-traded sectors (households are able to be simultaneously classified in up to 5 groups with only beverage and food farming groups being defined as mutually exclusive).

Table 3.6 provides the breakdown of the size of each group, mean per capita household income standardized by the value of this variable for the whole sample, head-count poverty values (1 if a person falls in the poorest 30% of individuals ranked by per capita household income, 0 if not), and dependence of that household on each sector in terms of income source.

As Appleton and Collier note, in order to map out the effects of the relative price changes in Tables 3.3-3.5 on the sectoral allocations in Table 3.6, it is necessary to assume that the sectoral allocations in 1986 and 1988 in these two countries have not changed too much in the face of the relative price changes that have taken place, which have been particularly large for Ghana. The obvious inconsistency of this assumption and our inability to construct Table 3.6 for 1978 data forces the distributive analysis to be speculative in a retrospective way.

a. Beverage Farmers

The fall and rise (weak for Côte d'Ivoire) in the relative price of exportables during the stabilization and adjustment phases, respectively, must have affected Ghana and Côte d'Ivoire in different ways. In 1988 in Ghana, the dependence level of beverage farmers was low (i.e., of all the individuals in the survey,

TABLE 3.3: GHANA

PRICE MOVEMENTS, 1979-86

Year	Numeraire	Exports	Cocoa	Manufacturing	Non-Tradables			Trade Policy
					Food	Distribution	Residual	
1978	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1979	143.4	131.7	139.5	113.2	112.7	96.5	103.0	131.1
1980	214.7	121.4	139.7	104.8	114.7	129.5	97.3	120.9
1981	506.5	37.0	59.2	71.4	102.6	145.8	68.1	50.3
1982	536.6	29.4	55.9	60.9	131.6	184.6	75.6	63.8
1983	1081.0	63.4	83.3	77.4	159.9	181.8	76.9	124.7
1984	1907.8	95.0	78.6	94.8	100.6	166.0	81.5	284.5
1985	2373.9	112.1	94.8	140.1	71.8	130.3	130.3	386.2
1986	2988.0	160.1	142.1	156.7	68.6	140.2	95.7	504.8

TABLE 3.4: COTE D'IVOIRE

PRICE MOVEMENTS, 1979-86

Year	Numeraire	Exports	Cocoa	Manufacturing	Non-Tradables			Trade Policy
					Food	Distribution	Residual	
1978	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1979	111.6	96.0	89.6	99.0	109.1	94.2	94.0	101.5
1980	122.4	109.2	98.0	100.6	118.3	96.5	99.5	118.8
1981	139.2	97.0	86.2	93.3	109.4	92.2	96.5	145.9
1982	169.9	80.3	70.6	85.5	93.4	81.2	85.4	135.9
1983	193.6	76.2	62.0	79.1	85.6	75.5	79.5	124.0
1984	–	–	–	–	–	–	–	–
1985	203.7	93.8	73.7	93.0	86.8	76.4	81.0	113.4
1986	208.8	83.1	76.6	94.1	92.8	77.5	82.1	98.1

Numeraire is consumer price of manufactures (see Appendix III).

SOURCE: APPLETON AND COLLIER (1990).

TABLE 3.5: GHANA; COTE D'IVOIRE

PERCENTAGE PRICE CHANGES, 1979-86

	Ghana		Côte d'Ivoire	
	1978-83 (1978 base)	1983-86 (1983 base)	1978-83 (1978 base)	1983-86 (1983 base)
■ Price of importables to domestic consumers (Pcm)	+981%	+176%	+94%	+8%
- all changes below line are for relative prices with Pcm as the numeraire -				
■ Price for exportables received by domestic producers (Pxd)	-37%	+152%	-24%	+9%
■ Price for cocoa received by domestic producers	-17%	+71%	-38%	+24%
■ Price of distribution services (Pd)	+82%	-23%	-25%	+3%
■ Price of food (Pf)	+60%	-57%	-14%	+8%
■ Price of residual non-traded goods (i.e., excluding food and distribution) (Pnr)	-23%	+24%	-21%	+3%
■ Price, ex-factory of import substitutes (Pmp)	-23%	+102%	-21%	+19%

DERIVED FROM APPLETON AND COLLIER (1990).

TABLE 3.6: GHANA; COTE D'IVOIRE

CHARACTERISTICS OF LABOR GROUPS, 1986 and 1988

	Côte d'Ivoire 1986			Ghana 1988		
	Size (%)	Relative Mean Per Capita Income	% Poor	Size (%)	Relative Mean Per Capita Income	% Poor
Government Employees						
Some income	9.6	1.95	3.4	10.9	1.83	18.3
Highly dependent	7.4	1.87	4.4	4.5	2.77	30.3
Residual Non-traded Sector Employees						
Some income	11.9	1.75	11.7	14.6	0.97	26.6
Highly dependent	5.6	2.00	9.4	5.2	1.06	25.6
Manufacturing Employees						
Some income	9.3	1.50	15.1	4.2	0.94	25.2
Highly dependent	4.2	1.61	8.0	1.3	1.05	31.1
Traders						
Some income	31.6	0.80	38.1	37.1	0.94	26.2
Highly dependent	13.4	0.47	61.8	10.1	0.99	27.1
Beverage Farmers						
Some income	44.5	0.89	26.0	15.8	1.13	21.0
Highly dependent	8.2	1.21	12.5	1.1	1.11	19.0
Non-Beverage Farmers						
Some income	24.5	0.57	47.9	64.9	0.97	32.7
Highly dependent	13.9	0.52	48.3	39.4	0.84	33.0

SOURCE: APPLETON AND COLLIER (1990).

only 1.1 percent were members of households that derived more than 50 percent of their income from beverage production) and they were relatively affluent (mean incomes 11-13 percent above the sample average). Compared to Ghana in 1988, in 1986 in Côte d'Ivoire the dependence of beverage crop households on income from beverage crops was higher, and relative incomes were, overall, lower.

These 1988 and 1986 figures belie the two countries' very different macroeconomic experiences in the 1978-87 period. For instance, if the Ivorian figures for beverage growers in Table 3.6 look reasonable at the end of a price decline in export crop prices (see Table 3.4), then we can assume that the level of support the beverage crop growers received (tax incentives to the export sector and trade liberalization financed through the French Treasury) was distributionally neutral. The Ghanaian government's fiscally unsustainable attempt to support cocoa producer incomes in 1982 was not enough to avert a massive drop in relative cocoa prices. Despite the relative affluence and lack of dependence of households growing cocoa, the drop was probably large enough to plunge a relatively affluent group to below-average income levels.

b. Non-Traded Goods

Reductions in the price of non-traded goods relative to traded goods at the time of the surveys would be hard-felt by those households in these sectors (non-beverage, traders, and residual non-traded in Table 3.6) in both countries due to high dependencies (both within and across non-traded subsectors) and would be distributionally harsh due to low relative incomes, at least in 1986 and 1988. This probably holds true for Côte d'Ivoire at the beginning of the 1978-87 period, too, because of the small relative price falls that took place over the period (see Table 3.4). However, for Ghana, protectionist policies caused 1983 distribution relative prices (trader prices) to rise to 182 percent of their 1978 levels. Appleton and Collier suggest that this was distributionally detrimental because the allocation of import licenses was controlled by the larger and more established traders (the Ghanaian government was rationing the need for foreign exchange in the pre-adjustment phase).

c. Government Workers

In contrast to the fiscal discipline enforced by the WAMU in Côte d'Ivoire, Ghanaian government expenditure in the early 1980s was slower to decline. The Ivorian government froze public sector nominal wages and recruitment for much of the early and mid-1980s whereas for Ghana, although real wages collapsed over the 1975-83 period, civil service recruitment grew at a rate of 14 percent per annum (Appleton and Collier, 1990). In an effort to raise efficiency (and curtail moonlighting), real wages have since risen and redeployment has occurred at a planned rate of 5 percent each year starting in 1986.

If these changes were to take place at the times of the surveys, the distributional effects (apart from effect of the decline in government services on the government services user-profile) would depend on how easily retrenched workers could find work. Although civil service workers are relatively well off (in terms of all income sources combined), their dependence on this income source is quite high (individuals in households classified as highly dependent also appear in the groups classified as earning some income from the source: for government employees these two sets of figures are very close, e.g., for Côte d'Ivoire the figures are 9.6 percent: 7.4 percent). Appleton and Collier suggest that at the times they were implemented, the Ivorian policies had positive distribution effects given that the Ivorian civil servants are still relatively wealthy despite wage freezes.

In contrast, the Ghanaian policies, through retrenchment, may have increased inequalities due to (1) increased real wages to an already wealthy group, and (2) possible retrenchment of the most economically vulnerable groups (as desirable as this may be in terms of efficiency objectives--see van der Gaag et al., 1989 for a discussion of this efficiency/equity tradeoff in the Ivorian context).

Unfortunately, this distributional analysis does not employ women as a second-stage disaggregation. For our purposes, a gender disaggregation is surely the next extension in the analysis portrayed above: what is the gender composition of the beverage grower, non-beverage grower, trader, residual non-traded, and government employee groups?

D. Distributional Analyses Other Than Gender

Before moving on to Section III and the role of women in Côte d'Ivoire and Ghana, a brief review of other attempts to analyze the distributional impacts of adjustment in Côte d'Ivoire is presented. The later availability of Ghanaian household survey data has stymied attempts at similar analyses for Ghana, but the completion of these types of analyses can only be one or two years away.

The Glewwe and de Tray (1988) analysis for Côte d'Ivoire looks only at the vulnerability of the poor; supply-side/gender issues are not addressed. Income and expenditure data from the 1985 CILSS are used to identify the poor. The authors show that short-cut measures to identify the poor such as anthropometric, land, and education data are prone to leakage rates of 40 percent, i.e., 40 percent of individuals classified as poor using the income and expenditure aggregates would not be classified as poor using the other less costly indicators (Glewwe and Kanaan, 1989 extend this single-variable approach to a multivariate one, thereby reducing leakages). Glewwe and de Tray find the poor (defined at various percentile cut-offs in terms of per capita income and expenditure) are located mostly in the rural regions (although this phenomenon, also recorded for Ghana, is probably biased due to imperfect regional cost-of-living indices). They also find the poor to be a heterogenous group; for instance, the poor are not easily categorized into socioeconomic groups as evidenced by an income inequality analysis which shows that 75 percent of income variation across households is <u>within</u> groups, as opposed to <u>between</u> them.

Glewwe and de Tray suggest that because the poor exhibit such a low utilization of public services, they are insulated from Ivorian policies to reduce higher-education support, to train more nurses relative to doctors, and to introduce health service user fees. Agricultural policy, in terms of the promotion of tree crops (cocoa, cotton, and coffee), is seen to be of potential benefit to the poor (most of whom are smallholders). Of the poorest 30 percent of households, 52 percent grow at least one of these three tree crops, with cotton especially important in the poor northern savannah region. They are optimistic about the effect of input subsidy removals on cotton and rice, because for cotton the reduction in export taxes (i.e., through the liberalization program) is offsetting, and for rice, only irrigated plots, rare in the poorer forest and savannah regions, will be directly affected.

The general assertion of Glewwe and de Tray, that the majority of the poor will not be adversely affected by stabilization and adjustment policies, is supported by Hood et al. (1988) who report annual real income reductions resulting over the stabilization period as being 18 percent for the higher income groups, 11.1 percent for the middle-income groups, 3.7 percent for the poor urban groups, and 1-1.6 percent for the low-income rural groups. The higher income groups switched consumption to the inferior (in terms of income elasticities) goods offered by the informal urban and rural food sectors (Joekes et al., 1988).

Kanbur (1990) uses a family of decomposable poverty measures with Ivorian data (1985 CILSS) to describe poverty as do Boateng et al. (1990) for Ghana (1988 GLSS). The Boateng et al. paper is not an assessment of the poverty effects of adjustment per se, rather a profile of poverty in Ghana: who are the poor, both in terms of monetary and basic needs measures? Once again, the capital, Accra, and other urban areas show markedly lower rates of poverty. Gender breakdowns of the GLSS by Haddad (1990) will be presented in Section III. Particularly interesting are the Grootaert and Kanbur (1990) proposals for a longitudinal analysis of the Ivorian data (1985, 1986, 1987 and 1988). Using these data (which are being prepared by the University of Warwick, England), the authors suggest that they will be able to identify persistent patterns of poverty, and, using the 3 panels (1985-86, 1986-87, 1987-88), undertake a dynamic assessment of the evolution of poverty, controlling for household-unobservable effects.

E. Summary

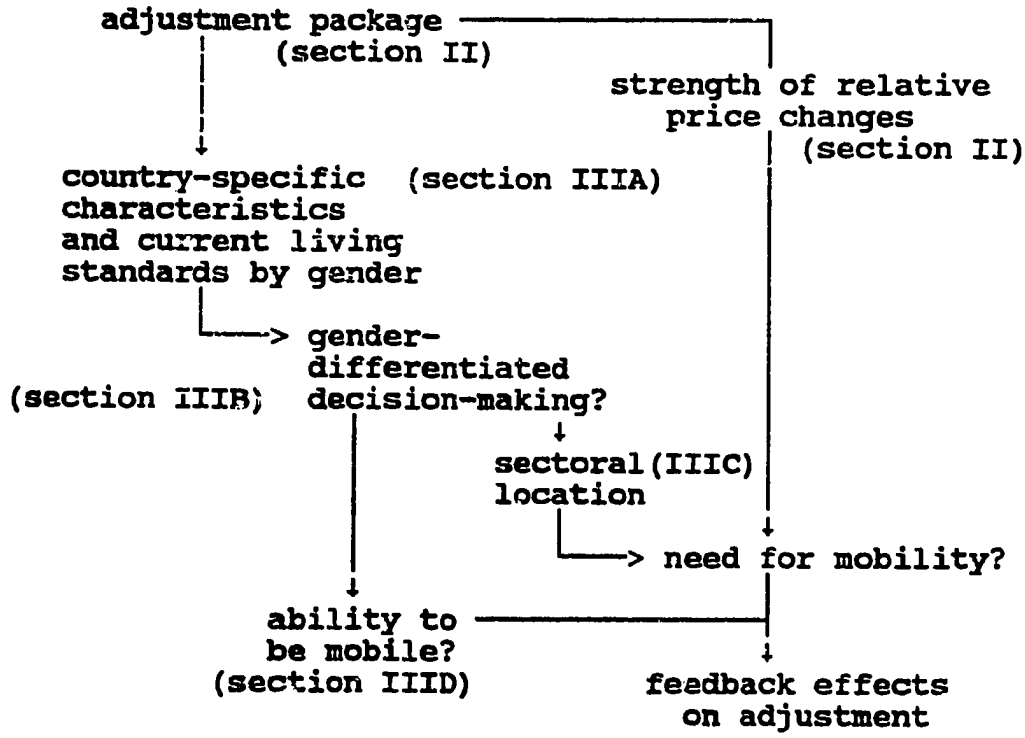
From a historical perspective, the different paths taken by the two countries was symbolized by the wager between Félix Houphouet-Boigny and Kwame Nkrumah in 1957. From a gender perspective, colonialization, urbanization, and deforestation have placed differentially heavy burdens on women (need to raise food production, less access to education, heavier time burdens).

The economic analysis in Section II told us several things. (a) Relative price changes have been much more volatile in Ghana than in Côte d'Ivoire. (b) Ivorian trade liberalization could occur much more quickly due to the convertible nature of the CFA franc. (c) Fiscal policy in Côte d'Ivoire was much tighter than in Ghana due to the WAMU rules. (d) Urban retrenchment of public sector employees took place in Ghana as opposed to wage and hiring freezes in Côte d'Ivoire. (e) Beverage crop growers in Ghana suffered more around the time of the stabilization process than did growers in Côte d'Ivoire and although Ghanaian real producer prices rose in the late 1980s while Ivorian ones did not, cocoa farmers in Côte d'Ivoire still receive a much greater proportion of the world price than do their Ghanaian counterparts. (f) Ghanaian food prices have fallen further than comparable Ivorian prices, although distribution (trader) prices have stayed high in Ghana, but not in Côte d'Ivoire. (g) Traders and farmers are the poorest groups for both countries (in general, the urban areas of both countries posted lower levels of "measured" poverty). In Ghana, traders are near overall average income levels, while for Côte d'Ivoire traders are the poorest group. (h) Ghanaian agriculture is less export-oriented than is Ivorian agriculture with 65 percent of the working age population deriving some income from non-beverage agriculture. Finally, we reasoned that food is both a non-tradable good and an unprotected import substitute for both Ghana and Côte d'Ivoire, implying that female labor mobility and access to new resources in existing sectors is likely to be important for successful adjustment.

III. INCORPORATING THE GENDER DIMENSION FOR GHANA AND COTE D'IVOIRE

This section examines the role of women in Ghana and Côte d'Ivoire. The strength of processes leading to gender-differentiated decision-making (discrimination outside the household, gender-specific role models, asymmetric rights and obligations within the household, and the burden of reproduction), the sectoral location of women, and the mobility of the resources at their command are described.

The diagram below summarizes the path the analysis has taken and will pursue:



Before looking at some of the explicit processes leading to gender-differentiated decision-making, the following section looks at the gender patterns of living standards in Ghana and Côte d'Ivoire. This is important because living standards underlie much in the above diagram. Poorer households will be relatively less able to bear any burdens resulting from stabilization and adjustment, and individuals in poorer households will provide role models for the younger household members therefore perpetuating the gender-differentiated processes we will examine in Section B below. This section draws on results derived for Ghana from Haddad (1990), and provides some data for Côte d'Ivoire from Sahn (1990), Strauss (1990), and Haddad and Hoddinott (1990). The Ivorian data are more limited as there has not been a gender disaggregation of living standards survey information which has been as complete as that for Ghana; this is a recurring problem throughout the analysis in Section III.

A. The Ability to Cope

It is worth noting at the outset, that in terms of food intake and nutritional status, Svedberg (1988) finds no compelling evidence of a gender "bias" in undernutrition in sub-Saharan Africa as a whole. This contrasts

with a large number of south Asian results which find that better nutrition and health is found among males (for a good review, see Harriss, 1987). Svedberg's definition of gender bias was based on individuals, and we will extend this to analyzing differences in living standards across households headed by men and households headed by women.

1. Ghana

Although prior analysis of the 1974/75 Ghana Household Budget Survey indicated that female-headed households account for disproportionately high levels of food poverty (Kyereme and Thorbecke, 1987), Ewusi (1976) analyzed income data from the same survey and found that 73 percent of female-headed households fell below his chosen poverty line ($100 per capita household income) compared to 76 percent of male-headed households, and in many ways this equivocation over what the data seem to be saying carries over to the GLSS data. Haddad (1990) analyzes Ghanaian poverty in several ways for male- and female-headed households using 1988 GLSS data. Three different poverty indicators--the food budget share; the Foster, Greer, and Thorbecke (1984) P_α family of poverty measures (which encompass the incidence of households falling below a poverty line and the depth below which they fall); and anthropometric indicators--are disaggregated by two different gender-head of household divisions: actual and self-reported. Individual-gender disaggregations are also used whenever possible.

a. Self-Reported or Actual Female-Headedness

Because regional differences could reflect spatial and /or enumerator team differences in the definition of the "female-headed" state and how that state was arrived at, it is important to check the self-reported definition against an actual definition. One approximation for actual status is the age-gender composition of the household. Haddad (1990) characterizes households according to the number of "adult," or "non-dependent" (between the ages of 15 and 60) males and females they contain, and then calculates a dependency ratio for the household defined as the number of individuals outside the 15-60 age range divided by household size. The data demonstrate a fairly close correspondence between the actual and the self-reported definitions: 87.5 percent of households which contain one adult female and no adult males are self-declared female-headed households.

b. Food Budget Shares

Tables 3.7a, 3.7b, and 3.7c show a positive association between women and poverty measured as the food budget share (based on aggregates described in Johnson et al., 1989a, 1989b). Table 3.7a shows that of households in the poorest group (foodshare quintile 5), 33.2 percent are female headed, as opposed to 21 percent in the least poor. In terms of all household members, although 52.7 percent of the individuals between the ages of 15 and 60 in the sample are female, for the poorest group the corresponding figure is 56.2 percent and for the least poor group the figure is 49.8 percent. This last result is more pronounced for individuals 60 years of age or older, although non-existent for children under 15. When the self-reported classification is further broken down by the actual classification as in Table 3.7b, it becomes clear that male-headed households containing more women than men (above the diagonal) have relatively larger food shares. For the female-headed households, small cell sizes restrict comparisons although it is clear that elderly households (no males or females in the 15-60 age range) are the poorest. Table 3.7c shows this association between women and larger food budget shares to be maintained for 8 out of 10 survey regions. Surprisingly, the result is reversed for the

TABLE 3.7a: GHANA

FOOD BUDGET SHARE AND GENDER

Food Share Quintile	Share	% Of House-Holds That Are Female-Headed	% Of Household Members By Age Group That Are Female				
			All	<15	15≤60	>60	n
1	45.4	21.0	49.8	50.0	50.0	45.5	618
2	60.4	25.7	50.8	49.5	52.6	47.6	619
3	69.3	32.7	50.1	48.2	51.8	51.3	618
4	77.3	33.3	51.9	50.4	53.0	55.7	619
5	87.0	33.2	52.5	48.2	56.4	56.2	618
ALL	67.9	29.2	51.0	49.2	52.7	52.3	3092

TABLE 3.7b: GHANA

FOOD SHARE BY GENDER OF HOUSEHOLD HEAD (M,F)

		Male-Headed: Females in Household 15 ≤ 60 yrs old				Female-Headed: Females in Household 15 ≤ 60 yrs old			
		0	1	2	3	0	1	2	3
Males in household 15≤60 Yrs (n)	0	70.5 (74)	74.2 (59)	69.2 (24)	57.8 (10)	77.3 (80)	69.4 (406)	71.0 (91)	66.8 (28)
	1	63.2 (378)	67.3 (846)	69.6 (177)	65.9 (44)	71.2 (18)	72.8 (90)	69.7 (54)	64.9 (20)
	2	63.7 (35)	67.3 (159)	68.8 (104)	67.5 (39)	66.8 (4)	69.5 (27)	71.8 (25)	62.3 (10)
	3	62.0 (8)	66.8 (56)	67.5 (37)	69.2 (15)	73.6 (2)	69.3 (8)	68.9 (6)	73.0 (3)

SOURCE: HADDAD (1990).

TABLE 3.7c GHANA

FOOD SHARE BY GENDER OF HOUSEHOLD HEAD BY REGION

Region	Male-Headed Households		Female-Headed Households		All Households	
	Food Share	n	Food Share	n	Food Share	n
Accra Metro	58.5	237	63.5	74	59.7	311
Mid Coast	65.5	202	70.9	112	67.4	314
West Coast	65.3	235	68.7	85	66.2	320
East Coast	62.4	191	66.8	111	64.0	302
East Forest	69.1	225	71.3	90	69.7	315
Mid Forest	61.8	197	68.6	103	64.1	300
West Forest	66.4	215	71.0	105	67.9	320
Upper Forest	71.5	170	78.7	135	74.7	305
Volta Basin	70.2	226	67.5	60	69.7	286
Savannah	75.5	290	72.6	27	75.3	317
Greater Accra	57.4	258	63.0	86	58.8	344
Other urban	61.4	544	66.5	266	63.1	810
Rural	70.8	1386	73.4	550	71.5	1936
Coastal	63.9	495	68.5	281	65.6	776
Greater Accra	57.4	258	63.0	86	58.8	344
Forest	67.6	889	73.7	436	69.6	1325
Savannah	72.8	548	67.1	99	71.9	647
Households which have the following gender balance of 15≤60 years old						
Males>Females	64.4	737	70.0	73	64.9	810
Males=Females	67.8	1045	74.4	198	68.8	1243
Males<Females	69.0	408	69.1	631	69.0	1039
ALL	66.9	2190	70.4	902	67.9	3092

SOURCE: HADDAD (1990).

two northern regions (see Figure 3.5)--Savannah and Volta Basin, precisely the opposite of what Norton (1988) has reasoned. The rural-urban breakdown in Table 3.7c shows the widest male-/female-headed household differences to be found in urban areas.

Even if we assume that the food share is a valid measure of poverty (i.e., we assume that the food expenditure elasticity with respect to total expenditure is less than one--a reasonable assumption given the results in the GLSS statistical abstracts [1989])--the above results could simply be a reflection of different food expenditure propensities across gender. Therefore, their robustness needs to be assessed for replication with alternative poverty measures.

c. The P_α Poverty Index

The P_α poverty index (Foster, Greer, and Thorbecke, 1984) has been found to be a useful poverty measure both for its ability to capture a range of value judgements on the significance of the depth of poverty and for its decomposability across mutually exclusive and exhaustive sample sub-groups. If real per capita household expenditures are assigned to individuals and ranked as:

$$Y_1 \leq Y_2 \ldots \leq Y_q \leq z < Y_{q+1} \leq \ldots Y_n$$

where z is the poverty line, n is the total population, and q is the number of poor, then P_α is given by:

$$P_\alpha = 1/n \sum_{i=1}^{q} (1-(Y_i/z))^\alpha \; ; \alpha \geq 0.$$

If $\alpha=0$ is chosen, no concern is exhibited about the depth of poverty but simply the fraction of individuals falling below the poverty line (also known as the "headcount ratio"). If $\alpha=1$, P_α measures the average shortfall from the poverty line (also known as the "income-gap ratio"). Values of $\alpha > 1$ give more weight to the larger income shortfalls. Table 3.8 shows P_α breakdowns (for two poverty lines and α=0, 1, 2) for males and females, individuals in male- and female-headed households, and individuals in households classified as either m>f (more adult males than adult females), m=f, or m<f. For both the upper and lower poverty lines (below which lie 35.1 percent and 7.4 percent of the sample, respectively), the poverty contribution of each group is close to their representation in the sample. The largest discrepancies occur in households which contain more adult females than males: they contribute 38.5 percent of the sample, but contribute around 46 percent to overall poverty. As a direct consequence of using per capita household expenditure measures, two caveats, working in different directions, must be mentioned: per capita measures will be understated for younger households with more children (the m<f households), but they also ignore intrahousehold income differentials, which could work against women.

d. Anthropometric Indicators

Standardized z-scores for weight-for-height (zwl) and height for age (zha) for Ghanaian preschoolers are presented in Table 3.9 (zha=[height-median height of individuals of the same age group in a healthy population]/standard deviation of height in the healthy population).

FIGURE 3.5B
MAP OF COTE D'IVOIRE: REGIONS

SOURCE: WEEKES-VAGLIANI (1985).

TABLE 3.8: GHANA

POVERTY INDICES BY GENDER, AND GENDER OF HOUSEHOLD HEAD

Lower Poverty Line

Group	% popn	% contribution to poverty P0	P1	P2
Males	49.0	47.2	48.5	49.0
Females	51.0	52.8	51.5	51.0
In male hoh	74.8	74.2	79.6	84.0
In fem hoh	25.2	25.8	20.4	16.0
M>F	22.7	19.1	21.5	21.1
M=F	38.8	33.5	32.1	34.7
M<F	38.5	47.4	46.4	44.2
ALL	100.0	100.0	100.0	100.0

Upper Poverty Line

Group	% popn	% contribution to poverty P0	P1	P2
Males	49.0	47.4	47.8	48.1
Females	51.0	52.6	52.2	51.9
In male hoh	74.8	72.2	73.8	75.3
In fem hoh	25.2	27.8	26.2	24.7
M>F	22.7	20.5	20.9	20.6
M=F	38.8	34.4	33.5	33.1
M<F	38.5	45.1	45.6	46.2
ALL	100.0	100.0	100.0	100.0

HH gender bal:	Male Hoh's			Female Hoh's			All Hoh's		
15≤60 yr olds	%<low	%<upp	nm	%<low	%<upp	nf	%<low	%<upp	n
Males>Females	6.7	32.3	2960	2.9	28.4	412	6.2	31.8	3372
Males=Females	6.1	29.4	5008	8.1	42.4	762	6.3	31.1	5770
Males<Females	9.9	42.6	3143	8.1	39.3	2579	9.1	41.1	5722
ALL	7.3	33.9	11111	7.5	38.7	3753	7.4	35.1	14864

SOURCE: HADDAD (1990).

TABLE 3.9: GHANA

Z-SCORES FOR GHANAIAN PRESCHOOLERS BY REGION, GENDER

Household Group	Male-Headed Household			Female-Headed Households			All Households		
	ZHA	ZWL	n	ZHA	ZWL	n	ZHA	ZWL	n
Accra Metro	-.72	-.14	116	-1.10	-.33	42	-.82	-.19	158
Mid Coast	-1.33	-.63	160	-1.63	-.39	69	-1.42	-.56	229
West Coast	-1.12	-.51	198	-1.21	-.51	64	-1.14	-.51	262
East Coast	-1.04	-.51	139	-1.19	-.48	56	-1.09	-.50	195
East Forest	-1.05	-.38	174	-1.34	-.37	56	-1.12	-.38	230
Mid Forest	-1.46	-.38	129	-1.64	-.48	85	-1.53	-.42	214
West Forest	-1.59	-.65	210	-1.66	-.35	80	-1.61	-.57	290
Upper Forest	-1.08	-.69	141	-1.30	-.55	106	-1.18	-.63	247
Volta Basin	-1.35	-.50	216	-.94	-.68	39	-1.28	-.52	255
Savannah	-1.48	-.71	245	-.71	-1.02	20	-1.43	-.73	265
Greater Accra	-.71	-.12	118	-1.05	-.23	40	-.80	-.15	158
Other urban	-1.01	-.46	368	-1.04	-.42	173	-1.02	-.45	541
Rural	-1.38	-.59	1242	-1.53	-.53	404	-1.42	-.58	1646
Coastal	-1.08	-.55	375	-1.33	-.39	179	-1.16	-.50	554
Greater Accra	-.71	-.12	118	-1.05	-.23	40	-.80	-.15	158
Forest	-1.42	-.54	723	-1.46	-.51	323	-1.43	-.53	1046
Savannah	-1.29	-.60	515	-1.17	-.70	75	-1.27	-.61	590
Males>Females	-1.30	-.52	264	-1.26	-.43	33	-1.30	-.51	297
Males=Females	-1.18	-.53	972	-1.53	-.55	74	-1.20	-.53	1046
Males<Females	-1.39	-.53	495	-1.34	-.47	510	-1.37	-.50	1005
ALL	**-1.26**	**-.53**	**1731**	**-1.36**	**-.48**	**617**	**-1.28**	**-.52**	**2348**

SOURCE: HADDAD (1990).

Table 3.9 has several important features. (i) Z-scores are much lower in Ghana compared to Côte d'Ivoire. Ivorian data show mean values of zha and zwl of -0.34 and -0.18, respectively (Haddad and Hoddinott, 1990), compared to -1.28 and -0.52 for Ghana. Strauss and Mehra (1989) confirm these findings, and comment on the low incidence of Ivorian stunting relative to other west African nations. (ii) There are no statistically significant differences in either zha or zwl across the male-/female-headed classification, or indeed by gender of preschooler (data not reported). For instance, children from female-headed households are slightly more stunted (low zha), and slightly less wasted (low zwl) than their counterparts in male-headed households, but neither result is significant at the 5 percent level (t_{zha} =1.44, t_{zwl}=1.15). The four-way disaggregation does not show any major differences either; for example, boys within female-headed households have similar z-scores to boys within male-headed households (t_{zha}=1.25). (iii) The regional poverty patterns as measured by food budget share are mirrored by both zha and zwl for children in male-headed households, but not children from female-headed households.

Multiple regression analysis of the same data (Alderman, 1990c) fails to reject the hypothesis that anthropometric outcomes are different across gender of preschooler. Alderman does not include a child in his regression sample if there are no measurements on the father for height and education, and, consequently, cannot examine the effect of membership of a female-headed household. He could, however, have examined the effects of seniority of wife in polygamous households which might have elucidated the hierarchy of income flows within Ghanaian households.

2. Côte d'Ivoire

To date, there has been no broad, gender disaggregation of the CILSS data; therefore, evidence for Côte d'Ivoire is more fragmented than for Ghana. This section reports CILSS data analyses from Glewwe (1986, 1987), Sahn (1990), Kanbur (1988), Strauss (1990), and Haddad and Hoddinott (1990) which all look (with varying degrees of directness) at gender issues.

a. Total Household Expenditure

Glewwe (1986, 1987) performs a before and after adjustment exercise which, although ultimately flawed due to compatibility problems, could be attempted with Ghanaian data from the GLSS and the 1974/75 Ghana Household Budget Survey.

Glewwe compares 1985 CILSS data with the 1979 Ivorian Household Budget Survey, but because of underestimation of consumption expenditures (i.e., the valuation of consumption of own-produce is too high in the 1979 survey), he states "little can be said about how different groups of Ivorians were affected by the decline in the Ivorian economy" (in the early 1980s) and concludes that this "unfortunate conclusion underscores the importance of improving the quality of household survey data gathered in developing countries."

In 1979, 4.9 percent of the sample were from self-declared female-headed households, whereas in 1985 this figure was 6.1 percent (although this figure is revised to 10 percent in Glewwe, 1987). The corresponding figure from 1987-88 for Ghana is 29.2 percent; an analysis to account for the vast difference between countries would be useful in helping us sort out what is being represented by the respondent who describes herself as the household head. As in Ghana, female headedness in Côte d'Ivoire is predominantly an urban phenomenon, but

with a heavier relative concentration in Abidjan than in Accra. The
in Abidjan:all Côte d'Ivoire is 18:10, while for Accra:Ghana it is 24:2
is 13:10, while for Ghana the corresponding figure is 33:29.

In terms of welfare (total household expenditure per capita),
than male-headed households at the national level in both the 1979 an
because of the concentration of female-headed households in the w
comparison within regions, female-headed households turn out
(approximately 20 percent poorer in Abidjan) except East Forest. T
statistical significance of these differences (Glewwe, 1987). It would be
held with household expenditure standardized by adult equivalents, whi
would be less for female-headed households than male-headed hou
numbers of individuals. In other words, female-headed households like
than do male-headed households for this sample.

b. Non-Food Expenditure

One way of estimating gender differentials in househ
household expenditure patterns differ according to household age-ge
impact of children on household expenditures, one should only cons
reasonably considered to be candidates for exclusive consumption by a
Only for these goods can we formulate and test the hypothesis that
budget constraint to the left. The question is, does a female child, a
less of an impact on household expenditure on adult goods than a m
CILSS) and Haddad and Hoddinott (1990: 1986-87 CILSS) conclude t
adult goods expenditure according to whether the additional child is

c. Anthropometric Indicators

The z-scores in Table 3.10 for the 1986-87 data demo
significant patterns across gender of preschooler (Haddad and Hoddi
intervening variables are controlled for with multiple regression tech
insignificant in the determination of z-scores is confirmed by Haddad
1985-86 CILSS data), and Sahn (1990 for pooled 1985-86-87 CILSS
continuous-value community variables with the gender of the presch
share of household income earned by females, and dummy variables fo
wife household. None of these variables proved significant, either sin
found for the 1985-86 data that Haddad and Hoddinott could not repr
the 85-86-87 pooled sample) was the positive significance of the w
standardized height.

3. Summary

In summary, there are no outstanding differences in welfare b
either Ghana or Côte d'Ivoire. For some measures of welfare, fem

TABLE 3.10: COTE D'IVOIRE

Z-SCORE SUMMARIES; ZHA (HEIGHT FOR AGE), ZWA (WEIGHT FOR AGE), AND ZWL (WEIGHT FOR LENGTH)

	Mean ZHA			Mean ZWA			Mean ZWL		
	Gender of Preschooler			Gender of Preschooler			Gender of Preschooler		
	Male	Female	All	Male	Female	All	Male	Female	All
Age Group									
< 6 months	0.415	0.158	0.284	0.122	0.403	0.266	-0.073	-0.067	-0.002
6 < 24 months	-0.483	-0.269	-0.373	-0.834	-0.638	-0.733	-0.526	-0.602	-0.565
24 < 48 months	-0.460	-0.488	-0.474	-0.469	-0.415	-0.442	-0.155	-0.078	-0.117
48 ≤ 60 months	-0.493	-0.246	-0.379	-0.419	-0.091	-0.267	-0.053	-0.033	-0.044
Ecological Zone									
East Forest	-0.194	-0.111	-0.154	-0.515	-0.327	-0.425	-0.383	-0.377	-0.380
West Forest	-0.476	-0.327	-0.407	-0.233	0.130	-0.063	0.166	0.447	0.297
Savannah	-0.616	-0.487	-0.549	-0.579	-0.452	-0.513	-0.168	-0.285	-0.229
Rural/Urban									
Abidjan	-0.058	0.014	-0.020	-0.442	-0.397	-0.418	-0.404	-0.551	-0.482
Other urban	-0.404	0.009	-0.206	-0.462	-0.174	-0.324	-0.182	-0.304	-0.240
Rural	-0.465	-0.493	-0.478	-0.482	-0.283	-0.386	-0.144	-0.018	-0.083
All	-0.392	-0.290	-0.342	-0.472	-0.277	-0.376	-0.191	-0.174	-0.183

SOURCE: HADDAD AND HODDINOTT (1990).

male-headed households (food budget share in Ghana, total per capita household expenditure in Côte d'Ivoire), but, for others, there seems to be little difference in living standards across the sexes (anthropometric measures, non-food expenditures, total household expenditures, the $P\alpha$ index). Clearly, more work has to be done in this area, for Côte d'Ivoire in particular, but, on the measurable indicators of welfare available, there does not seem to be a strong gender-bias in Côte d'Ivoire or Ghana.

B. Gender-Differentiated Processes

This section draws on available anthropological and sociological literature, as well as on analyses performed on the GLSS and CILSS data to describe processes that may lead to and/or perpetuate gender inequality in welfare levels or resource mobility. These gender-specific processes may keep women out of the wage labor market, and force them to reallocate their labor outside the labor market. But these processes might also impede reallocation of self-employed women's labor through poor access to credit, information, and land.

Collier (1989) has characterized the overall process as: low female education and high fertility --> low return activities (poor role models) --> low female status --> low autonomy --> no access to characteristics that enhance wages --> shut out of labor markets --> low education --> high fertility, etc. What is the evidence for this cycle in Côte d'Ivoire and Ghana?

1. Gender-Specific Role Models

a. Education

Ghana's female literacy rates are relatively high compared to other west African countries. Females accounted for nearly one half of formal primary school enrollment in 1974; however, female enrollment rates fall off sharply later on at the secondary and tertiary levels compared to males (Ware, 1983).

Figures 3.6-3.9 show school attendance and achievement patterns by age and gender for children and young adults for Ghana in 1987-88. The striking aspect of these figures is that although the percentages of individuals who have ever attended school (Figure 3.6) is around 70 for females and 80 for males (and they even converge at the younger ages--10-12), actual achievement in terms of literacy, numeracy, and writing diverges drastically at ages 13-15 as shown in Figures 3.7-3.9. A combination of factors could be at work here. Girls are attending school more infrequently or less intensively; they are not given the same attention by teachers as are the boys, or they take subjects that are less demanding of these acquired skills. The same data also show that once in school there seems to be no gender difference in the number of hours actually spent in attending classes (7-day recall); unfortunately, we have little information as to the content of the course subjects. Available qualitative evidence seems to explain the Ghanaian attendance and achievement numbers in terms of subjects taken. Gender-differentiated education begins early in a Ghanaian child's life, with Brydon (1985) commenting that the "primary school curriculum (in Avatime, Ghana) tends to push girls in the direction of "home science" and primary school teaching, rather than to give them more rigorous academic goals."

Ivorian schooling displays similar gender patterns. In the UN's Economic Commission for Africa (African Training and Research Centre for Women) report (1986) "Women and the Industrial Development Decade in Africa," Solomon (1986) states: "Most families think that modern education destroys traditional values and women's role in traditional society. There is also a fear that children who go to school become disrespectful towards their families and that girls become more vulnerable to temptations resulting in unwanted

FIGURE 3.6: GHANA
SCHOOL ATTENDANCE RATES BY AGE AND GENDER

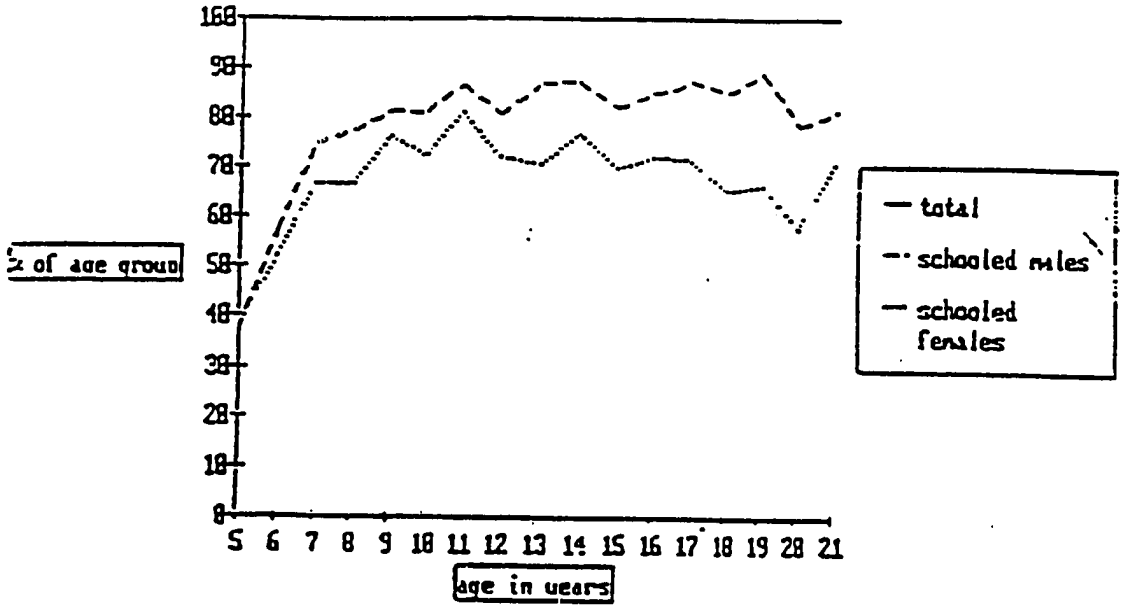
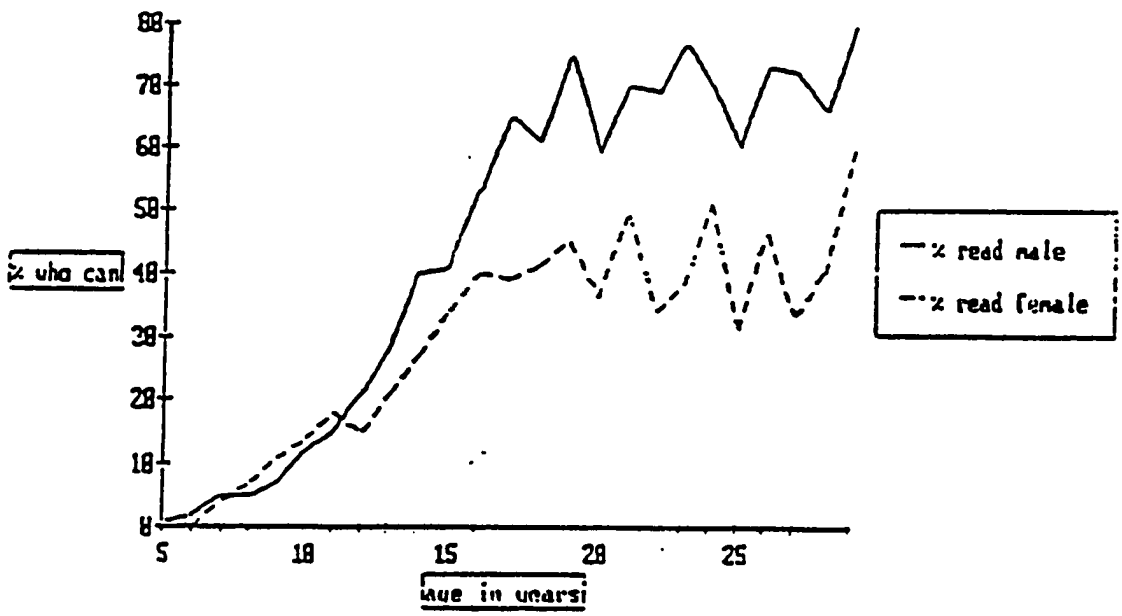


FIGURE 3.7: GHANA
READING ABILITY BY AGE AND GENDER



SOURCE: HADDAD (1990).

FIGURE 3.8: GHANA
WRITING ABILITY BY AGE AND GENDER

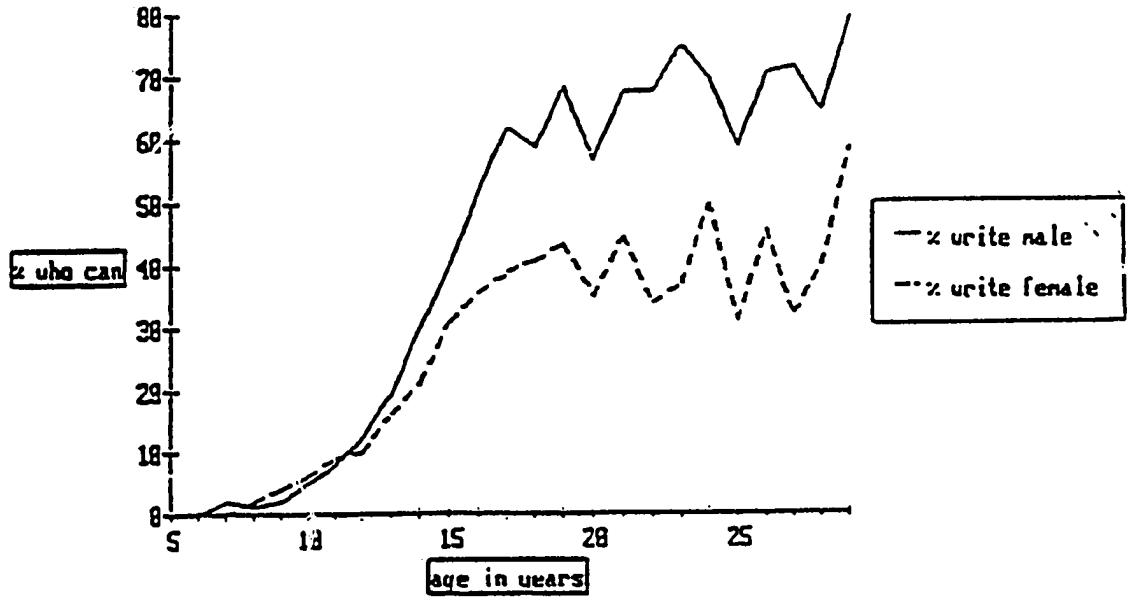
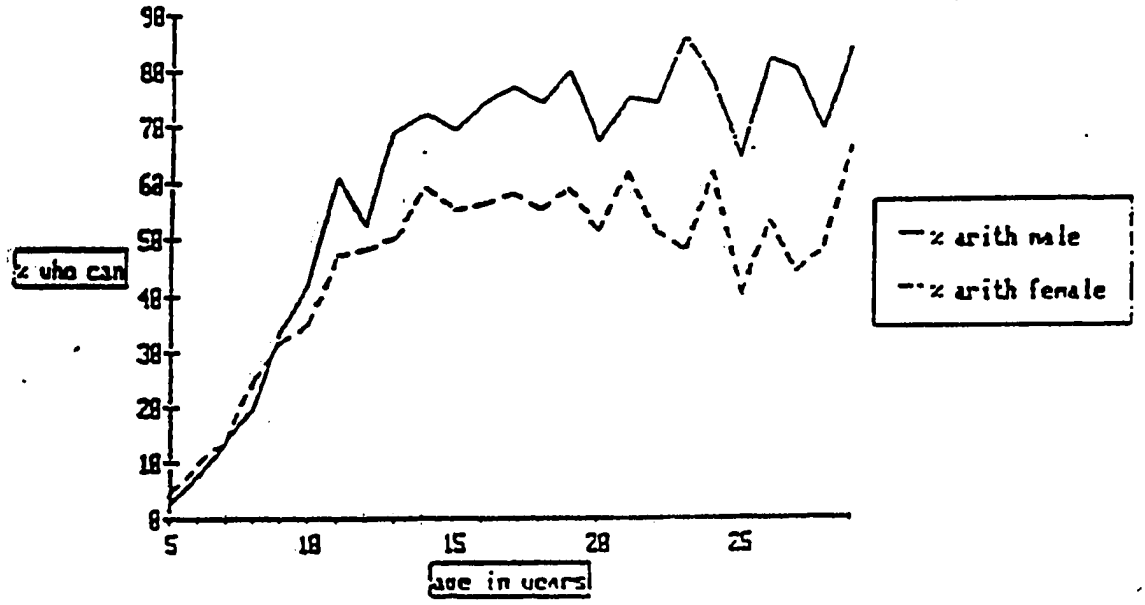


FIGURE 3.9: GHANA
NUMERACY BY AGE AND GENDER



SOURCE: HADDAD (1990).

pregnancies....The predominantly female fields of study are the commercial (typing, bookkeeping and secretarial training) and the social sections."

For Côte d'Ivoire, Blundell et al. (1990) perform a labor-markets panel (cohort) analysis across 1985-86 CILSS data. For their rural panel sample, they present school attendance data for rural labor force participants aged 12 and above (n=391). Even though the samples are small and not nationally representative, the disparity across gender in terms of school attendance comes through, and becomes large at the age of 14 (see Table 3.11). Table 3.12 anticipates the phenomenon of education as a barrier to labor market entry for women in Côte d'Ivoire (and Ghana); note the low levels of female educational achievement relative to males overall, but the superior female attainment relative to men of those individuals actually in the waged labor market.

Apart from returns to the cognitive achievement (see Sections III.C and III.D) and the fertility reductions that are associated with more schooling, Levy and Newman (1989) demonstrate that schooling also promotes sectoral labor mobility. Two labor force surveys from Côte d'Ivoire (1979 and 1984) show that for those individuals moving from the unprotected to the protected sectors (a refinement of the formal/informal sector segmentation), educational achievement was their most distinguishing attribute. Blundell et al. (1990) also note the "critical importance of schooling in the stability of (urban) employment patterns over this period (1985-86)."

In general, gender attitudes toward education are summed up by Spring (1988) who states "all over Africa, the development curriculum for boys is gender-specific. Women are considered gardeners, instead of farmers so women's agricultural extension curriculum includes only instruction in small-scale poultry and vegetable production rather than in major staple crops and large livestock."

Adult education may be one way of effectively raising female employability, but results from some 1970s programs in Abidjan were mixed, reports Lewis (1977). Job-specific training programs were offered for women with some education in the areas of clerical and commercial skills (key punching, elementary accounting, shorthand, and saleswomanship for large retail enterprises). Some internship programs also provided women with training in education, medicine, or public health. However, these training courses were offered only to women who had completed secondary education. Another type of program offered to women with little or no education had as its objective the provision not of vocational skills, but the knowledge and skills to improve infant care and home making: nutrition, hygiene, family health, cooking, and sewing. Sewing was the only vocational skill offered as a useful source of income. However, the cautionary tale in all this is brought out by Lewis (1977) who points out that this human capital creation was often of little use in the generation of further income because of the lack of female access to complementary inputs such as the sewing machine or the credit and collateral with which to purchase it.

b. Respondent-Parent Occupational Patterns

Instead of examining educational patterns, a more direct way of examining role-model formation by gender is to focus on respondent-parent (or intergenerational) occupational patterns. Table 3.13 presents some occupational "fixity" evidence from Ghana from the 1987-88 GLSS data. In two thirds of the age-occupational cells, the percentage of females employed in the same occupation as at least one parent is higher than the corresponding figure for males (this would be more interesting if broken down by gender of parent). Although the result is not dramatic, it is consistent with the hypothesis that males exhibit a greater inter-sectoral mobility across generations. The greatest parent-respondent occupational continuity is in agriculture with an

TABLE 3.11: COTE D'IVOIRE

SCHOOL ATTENDANCE IN RURAL COTE D'IVOIRE (PERCENTAGE OF RURAL PANEL SAMPLE CURRENTLY ATTENDING SCHOOL)

Age (1985)	Males 1985	Males 1986	Females 1985	Females 1986
12	73.1	67.3	58.3	58.3
13	66.7	64.4	45.5	39.4
14	50.0	44.4	18.8	18.8
15	35.7	32.1	22.2	18.5
16	36.0	28.0	18.8	12.5
17	16.7	12.5	6.7	6.7
18	20.0	16.7	0.0	0.0
TOTAL	47.9	43.3	27.8	25.2

SOURCE: BLUNDELL ET AL. (1990).

TABLE 3.12: COTE D' IVOIRE

ADULT EDUCATIONAL ATTAINMENT BY GENDER AND LABOR MARKET STATUS

	Total Sample		Urban Waged Sample	
Educational Characteristics	Females	Males	Females	Males
(% who have obtained)				
CEPE (primary school certificate)	25.2	50.8	79.1	69.2
BEPC (secondary school certificate)	4.6	15.5	27.3	25.2
HIGHER (higher-level certificate)	1.5	6.2	13.6	11.9
TECH (technical school)	7.2	15.0	47.3	33.1
Can read	39.4	66.9	87.3	80.3
Can write	38.5	64.4	87.3	77.8
Are numerate	40.1	70.2	90.0	84.0
Grades completed primary	2.33	3.77	5.15	4.54
post-primary	0.63	1.98	3.65	3.34
Years in technical school	0.26	0.50	1.55	1.05

SOURCE: HORSNALL (1990).

TABLE 3.13: GHANA

RESPONDENT-PARENT OCCUPATIONAL PATTERNS

% of Individuals in Same Occupation as at Least One Parent*

Main Job 7 Days	Age Group: 7 < 15 Male	7 < 15 Female	15 < 21 Male	15 < 21 Female	21 < 45 Male	21 < 45 Female	45 < 60 Male	45 < 60 Female	> = 60 Male	> = 60 Female	All Male	All Female
Professional					6 (99	8 51)	0 (26	14 7)			6 (131	9 65)
Admin./Manag.											0 (11	0 2)
Clerical					4 (54	3 30)					4 (75	3 32)
Sales	31 (16	43 47)	42 (19	33 107)	11 (73	28 410)	5 (20	23 84)	50 (4	14 28)	18 (132	29 676)
Services			40 (10	17 12)	14 (66	14 36)	2 (40	15 4)			14 (125	16 55)
Agriculture	95 (557	94 384)	95 (482	94 347)	93 (850	96 927)	94 (288	97 356)	92 (183	97 117)	94 (2360	95 2131)
Prodn/Transp	50 (14	71 17)	19 (67	37 63)	15 (343	20 191)	21 (98	23 64)	21 (29	35 20)	18 (551	27 355)
All	92 (588	87 450)	83 (586	73 534)	58 (1492	64 1647)	60 (488	74 516)	78 (232	73 169)	70 (3386	70 3316)

*Age-occupation cells (frequencies reported in parentheses) containing less than 20 individuals are left blank.

SOURCE: HADDAD (1990).

almost imperceptibly higher level of female fixity. Female occupational fixity relative to men is highest in the "production and transport" sector.

The sales sector displays the most provocative patterns, however: there is a monotonic decline in female parent-respondent continuity as we move up the age groupings. Unfortunately, it is impossible to disentangle the two main explanations for this. First, the sales sector is an entry point into the labor force, and, as individuals build up skills and experience, they switch occupations as opportunities arise. Second, if there is an intra-individual occupational fixity within the sales sector, then the figures in Table 3.13 imply that more women are entering the sales sector than ever before--an indication that they face barriers to entry in production-oriented activities, or that trading is more profitable.

2. Asymmetric Rights and Obligations

a. Decision-Making in the Household

In Ghana, the conjugal unit is often not synonymous with the economic unit--either by customary law or by statutory law. The degree of women's control of their own production varies according to ethnic group. In the south, women have traditionally had complete control over their own production whereas in the northern territories women generally face more limitations to their control (Steel and Campbell, 1982; Abu, 1983). This separation of budgets between husband and wife indicates that increases in household income do not necessarily lead to increases in women's income. For example, where men shift from food production to cash cropping or wage labor, women often take on the additional responsibility for providing the family with staple foodstuffs. In both the north and south, the substantial numbers of female-headed households means that the whole family budgeting system rests entirely with women. Particularly in northern Ghana is this a modern phenomenon. Given the fact that the north is relatively poor and women have less rights in patrilineal societies, northern women in the female-headed families are often hypothesized to be amongst the poorest Ghanaians (Norton, 1988)--although we have not seen any evidence of this in terms of food share and anthropometric z-scores (Tables 3.7c and 3.9).

Table 3.14 uses information from the end of the first round of GLSS survey collection which enables the enumerator to target individuals "best informed" on specific topics for the second round of enumeration. Disaggregations by gender of household head and the gender composition of the household (in terms of adult members, ages 15-60) show that for food purchases and the main non-farm business, females tend to be "best informed." In female-headed households, there is little male involvement in the "control" (assuming best informed=control) of household activities even though the proportion of individuals in these households that are adult males is not small.

It is important to remember, however, that decision-making within the Ghanaian household, however accurately measured, exhibits regional patterns. Micklewhite et al. (in Dugbaza, 1981-82) report that for all activities in southern Ghana, decision-making and participation is a joint husband-wife arrangement, and for some activities, exclusively female (e.g., trading). However, they report that in the north there are no exclusively female decision-making activities, while men are the exclusive participants and decision-makers for such activities as credit use, cash crop sales, and the use of modern inputs.

In order to test the hypothesis that all income is pooled in Ivorian households, an attempt to assign gender control over cash from the sales of crops was made by Haddad and Hoddinott (1990). Using the material

TABLE 3.14: GHANA

BEST INFORMED INDIVIDUALS BY TASK BY
GENDER OF HEAD OF HOUSEHOLD, GENDER, AND AGE

	Characteristics Of Person In Household Who Knows Most About:										
	Overall		Agriculture /Livestock		Main Non-Farm Business		Food Purchases		Other Expenditures		
Group	% Male	Age	% Male	Age	% Male	Age	% Male	Age	% Male	Age	n
Males>Females	91	42	90	43	58	40	51	38	90	42	823
Males=Females	83	43	81	43	34	37	7	36	81	43	1260
Males<Females	38	45	45	45	13	38	1	36	38	44	1053
Male head of household	98	43	95	43	43	37	23	35	97	43	2222
Female head of household	1	45	6	45	5	39	0	40	3	44	914
ALL	70	44	71	43	31	38	17	37	69	43	3137

SOURCE: HADDAD (1990).

outlined in Weekes-Vagliani (1985, 1990), Gastellu (1987), and Bassett (1988) as a crop-gender guide, the authors attempt to assign cash income from crops to men and women. Their attempt, using CILSS 1986-87 data, was rather crude for several reasons. First, in some areas, both men and women grow the same crops but separately from each other. For example, amongst the Bete, riz fafre is grown by women and riz soderiz is grown by men. Second, there may be cases where income from crops accrues to men, but they "pay" their wives for assistance in growing the crop. Amongst the Baoule, this is the case for cash income from yams.

Third, male and female crops differ by ethnic group in Côte d'Ivoire. In constructing income from male and female crops, ethnic groups were matched to clusters based on the information in Weekes-Vagliani (1985) and Ainsworth and Munoz (1986). However, where ethnic groups were intermingled, ethnic distinctions between households were not picked up in the allocation of crops. This was a particular problem for households growing crops in urban areas.

Fourth, not only were there gender distinctions in control of crop income, but there may also be generational distinctions. For example, in households headed by elderly widows, the production of certain cash crops, and the control of their income, such as coffee or cocoa, may be the responsibility of adult males. Here, the authors took a conservative approach with the gender distinction over crops in households headed by women being maintained. Fifth, the respondent for the questions on the section on income from crops is the individual most familiar with this information (Grootaert, 1986). Where this was the male head, there were undoubtedly cases where he did not know the extent of production by his spouse(s).

Furthermore, there may be cases where women try to hide their income from their husbands; Blumberg (1987), for example, reports this to be the case in Honduras. Both possibilities suggest that women's cash income from crops may be understated. Finally, there were some crops that it was not possible to attribute to either men or women. These include rubber, wood, tobacco, sugar cane, fruit trees and pineapple, and miscellaneous unnamed crops. However, this did not pose a major problem as these crops constituted a small proportion of household agricultural income.

Mindful of these caveats, the following division was used:

a. Crops that are always male crops:

- cocoa
- coffee
- yams

b. Crops that are always female crops

- coconut palm
- oil palm

- plantain and bananas
- peanuts
- cassava
- taro
- sweet potato
- vegetables

c. Crops gender specific to particular ethnic groups

i. Bete areas:

male crops - as a. plus maize and half of rice

female crops - as b. plus half of rice

ii. Baoule areas:

male crops - as a. plus cotton

female crops - as b. plus kola nuts, maize, and rice

iii. Guoro areas:

male crops - as a.

female crops - as b. plus kola nuts, cotton, maize, rice, and millet

iv. Senoufo areas:

male crops - as a. plus cotton, sorghum, millet, and maize

female crops - as b. plus kola nuts and rice

Using these divisions, two estimates were made of men's and women's cash income. The first (pfinca) included income accruing to male heads and their spouses. The second (pfincb) used all cash income accruing to adult males and all cash income accruing to adult females. Dividing these by total household cash income gives the proportions reported below:

	Complete Sample	Urban Sample	Rural Sample
Proportion of household cash income accruing to:			
male heads	0.603	0.569	0.627
wives or widows of male heads (pfinca)	0.201	0.169	0.223
all adult males	0.638	0.632	0.643
all adult females (pfincb)	0.225	0.205	0.239

Engel curves were then estimated for the budget shares of the various goods below, allowing budget shares to be predicted at various levels of pfinca:

Budget Shares at Different Levels of Pfinca

Budget Shares where:	Pfinca =0	Pfinca =mean	Pfinca =2•mean	Pfinca =1
Food	0.4118	0.4332	0.4546	0.5182
Fuel	0.0443	0.0479	0.0515	0.0623
Children's clothing	0.0281	0.0260	0.0241	0.0180
Other goods	0.3288	0.3206	0.3044	0.2884
Meals out	0.0402	0.0354	0.0258	0.0162
Adult clothing	0.0900	0.0876	0.0859	0.0798
Alcohol	0.0308	0.0257	0.0205	0.0052
Cigarettes	0.0264	0.0235	0.0208	0.0124

Another way of representing these preliminary results is to specify changes in budget shares from a baseline at the mean pfinca value:

Percent Change in Budget Shares

% change by	Doubling Pfinca	Setting Pfinca Equal to One
Food	4.9%	19.6%
Fuel	7.5	30.0
Children's clothing	-7.3	-30.8
Other	-5.1	-10.0
Meals out	-27.1	-54.2
Adult clothing	-1.9	-8.9
Alcohol	-20.2	-79.8
Cigarettes	-11.5	-47.2

These results indicate, for example, that a doubling of the proportion of household income accruing as cash to women within the household would lead to almost a 5 percent rise in the budget share of food eaten within the household and a fall of 20 and 11 percent, respectively, in the budget shares of alcohol and cigarettes. To the extent that expenditures on food are desirable, and that those on alcohol and cigarettes are not, this would suggest an important coping rationale for skewing income-earning opportunities toward women in Côte d'Ivoire.

These results also provide some indication of the appropriateness of differing models of household behavior. Certainly, a case can be made for arguing that the significance of pfinca is not consistent with the dictatorial household model. If Ivorian households are ruled by dictators, then household expenditure patterns should not be affected by the distribution of income amongst other household members (because he can re-allocate his own income in such a way as to maintain expenditure patterns consistent with his own preferences). The significance of pfinca suggests that such a scenario, at least for this data, is incorrect (Haddad and Hoddinott, 1990).

From a policy point of view, does it matter which approach is correct? To some extent, it does not. The results indicate that increasing women's share of cash income will increase the budget shares of food and fuel and decrease those of children's clothing, restaurant meals, alcohol, and cigarettes. To the extent that these can be regarded as good things, then this provides sufficient justification for raising women's incomes. (Whether this changes household expenditures because women are in a more powerful bargaining position, or because households re-allocate resources according to the dictates of the common preference model, is of less significance.) While there is some merit in this view, it only holds provided the existing conditions hold. If men respond in unfavorable ways to women's increased cash incomes, for example by holding back an even greater proportion of their own income for their own purposes, then the welfare gains associated with increasing women's income will be less than those available were this not the case.

b. Time Burdens and Time Allocation

With respect to the workloads, Ghanaian women tend to be more heavily burdened than their male counterparts across most socioeconomic groupings (Roncoli, 1985). Women's workloads are increased by their household responsibilities such as food processing, cooking, child care, and fetching water and fuelwood. In the Northern regions of Ghana, women spend a great amount of their time on the last two duties without any remuneration in return. These responsibilities take time away from income-generating activities.

For the 1987-88 GLSS data, Table 3.15 presents individual time allocation by sex, age, employment status of the individual, and gender of household head. From this table we can make several observations. (1) Female time loads are 15-25 percent higher than those of males (there is no measurement for time involved in job search or time in a third job; but the very small number of respondents falling into these categories renders these factors unimportant for this data set). (2) The main source of the discrepancy is the much heavier commitment of women to household work. The general tendency is for women to spend 20 hours per week in this activity compared to the male contribution of 5 hours per week. Only one third of this discrepancy is compensated for by a reduction in female time spent in employment outside the home, as women work about 27 hours to men's 31 hours for single job holders, and 42 compared to 47 hours for multiple job holders. These heavy time burdens matter a great deal, especially in terms of the crowding out of new income-generating activities. For example, as a new source of income, women in the coastal Adioukrou district of Côte d'Ivoire turned to the production and marketing of attieke (a common food from cassava). However, this work was very laborious when added to women's household jobs such as cooking, washing, and gathering wood and water. These products brought only low profits because of the women's lack of access to prepared land and other resources such as transport (Traore, 1984).

c. The Burden of Reproduction

In both Ghana and Côte d'Ivoire, the desire for large families is strong. The 1981 Ivorian Fertility Survey (1984) recorded desired family size among all currently married women who gave a numeric response at 8-9 children. The 1983 Ghana Fertility Survey (see Oppong and Abu, 1987) records 60 percent of women expressing a desire for five or more children, while only 6 percent wanted three or less. Using 1985 CILSS data, Ainsworth (1989) comes to the conclusion that female schooling is associated with lower fertility while household income is associated with higher fertility.

This is a common finding: the higher levels of schooling delaying age at first marriage and increasing the opportunity cost of raising large numbers of children, while the increased income initially increasing the supply of children through better health, but eventually reducing the demand for the number of children while raising the demand for investment in the children. The burden of reproduction in terms of maternal health depletion is illustrated by Alderman for Ghana (Sahn did not examine adult women's health status for Côte d'Ivoire). Alderman finds that increased parity (number of pregnancies) has a negative and significant effect on adult female body mass index (weight/(height)^2).

3. Summary

Education is perhaps the most visible gender-differentiating process in both Côte d'Ivoire and Ghana, and we shall see later on that this has serious consequences for female sectoral location and resource mobility. In terms of educational achievement, females part company with males at the ages of 10-14. Another way of looking at role model formation is through respondent-parent data. Although respondent-parent occupational patterns from Ghana are intriguing, and provide food for thought, the analysis as it stands finds little firm evidence for occupational "fixity" differences across gender.

Asymmetric rights and obligations were examined in terms of decision-making, time burdens, and reproduction. Decision-making and income control within the household varies by region in both Ghana and Côte d'Ivoire. In the more northern regions, where both husband and wife are present, it is more likely that

TABLE 3.15: GHANA

TOTAL TIME (HOURS) ALLOCATED TO JOBS AND HOUSEWORK, 7 DAYS PRIOR TO INTERVIEW, BY GENDER AND GENDER OF HEAD OF HOUSEHOLD

Job	Age Group	All Households		Male Household Head		Female Household Head	
		Male	Female	Male	Female	Male	Female
One job only	22-45	46 (1093)	54 (1285)	47 (1008)	55 (928)	38 (85)	52 (357)
	ALL	40 (2753)	48 (2722)	40 (2411)	49 (1844)	34 (342)	46 (878)
At least two jobs	22-45	56 (399)	64 (360)	56 (381)	64 (236)	60 (18)	64 (124)
	ALL	56 (632)	63 (592)	56 (588)	62 (374)	53 (44)	63 (218)
(n)							

SOURCE: HADDAD (1990).

there will be no exclusively female decision-making activities, except for trading. However, evidence from Côte d'Ivoire suggests that income is not pooled because the percentage of income from women's crops affects household expenditure patterns, even when the level of household income is controlled for.

Time burdens are heavier for women than for men in Ghana (and reportedly in Côte d'Ivoire), with a small reduction in time spent in work outside the home failing to compensate for large disparities in the allocation of time for household duties. High levels of fertility are desired in both Ghana and Côte d'Ivoire. These levels decline with education, and increase with income levels. Some support for the existence of a maternal depletion syndrome in Ghana was presented.

C. Sectoral Location: the Need for Mobility

In an ideal world, this section would rely on a gender-disaggregated version of Appleton and Collier's Table 3.6 in Section II. Their table is useful because occupation codes are mapped into macroeconomically useful classifications: Government Employees, Residual Non-Traded Sector Employees, Manufacturing Employees, Traders, Beverage Farmers, and Non-Beverage Farmers. Instead, we have to piece together information from the GLSS, CILSS, and various other sources to speculate on the gender breakdowns of these groups and the necessity for labor mobility implied by the observed gender-specific sectoral locations.

1. Government Employees

Table 3.16 (using GLSS data) does not classify Ghanaian individuals according to whether they are government employees. Beaudry and Sowa (1990) do provide such a breakdown, but they do not disclose the age groups or recall period used; nevertheless, they report that 8.5 percent of their sample is employed by the government and that, of this group, approximately 27 percent are female.

2. Residual Non-Traded Sector Employees

Service and clerical categories show a 30 percent female representation in Table 3.16. Interestingly, female representation in the clerical group is very low above the 22-45 age group; perhaps indicative of rigidities, stifling upward mobility for women.

3. Manufacturing Employees

In Ghana's urban sector, women obtain little salaried work, which, as we will see below, undoubtedly mirrors lower levels of educational attainment compared to their male counterparts. Based on the 1960 and 1970 Censuses, Steel and Campbell (1982) and Fapohunda (1983) report that the majority of Ghanaian women work in the manufacturing, intermediate, traditional, and informal commercial sectors. The GLSS data back this up; female representation in the sectors labelled as production and transport is around 35 percent for women aged 22-60, higher for younger females, and approximately 40 percent overall.

TABLE 3.16: GHANA

PRIMARY OCCUPATIONAL STATUS BY AGE, GENDER, AND RECALL PERIOD

Main job, 7 day recall	Age Group 7-14	15-21	22-45	46-60	Gt 60	All	n
None	49.5	54.9	65.8	60.7	50.7	58.2	1483
Professional	.	57.1	34.0	22.6	37.5	33.2	196
Administrative	.	.	22.2	0.0	0.0	14.3	14
Clerical	.	16.7	35.7	7.7	0.0	29.9	107
Sales	74.6	84.9	84.9	77.8	91.3	83.7	808
Service	66.7	54.6	35.3	11.8	5.3	30.6	180
Agriculture	40.8	41.9	52.2	56.2	42.3	47.5	4491
Prodn/transp	54.8	48.5	35.8	35.4	49.3	39.2	906
ALL	44.8	49.2	54.5	52.4	46.5	51.1	8185

(. denotes empty cell)
SOURCE: HADDAD (1990).

4. Traders

The importance of trading for west African women can be appreciated by noting that whenever Islam functions to restrict women's economic activities (particularly in urban areas where the seclusion of women is more practiced; in rural areas, women are needed to work on farmland), it does not always prevent women from trading. Women among the Hausa (Nigeria) are engaged in trading through the system of house trade (Schildkrout, 1983).

A great number of women combine trading with agricultural or other employment. For instance, Peil (1975) reports that many women teachers and nurses were also engaged in trading activities on the side for additional income in the early 1970s. In fact, female labor force participation rates in small marketing towns are typically higher than in the capital Accra, because most able-bodied women are engaged in subsistence farming and/or trade (see Table 3.17).

Trading provides women who have little or no education with means of maintenance, but because there is so much competition, trading can be extremely unprofitable, as reported by Fapohunda (1983) for Côte d'Ivoire.

The GLSS data demonstrate the importance of trading as an occupation in Accra, and its female dominance across all regions and age groups (see Tables 3.16 and 3.17). Tripp (1981) notes the strong association between women's income from trading, even in Northern Ghana, and the anthropometric outcomes of their children. Of course, as a secondary occupation, trading is also important for many, with the GLSS data showing the majority of these individuals stating agriculture as their primary occupation.

5. Agriculture

The percentage of women in the agricultural labor force in Ghana has increased across various available data points: 1960 Census data report this figure to be 36.6 percent; 1970 Census data report 43.2 percent (Ewusi, 1987); and 1984 Census data report 51 percent (Ardayfio, 1989). Table 3.16 shows that of all individuals engaged in agriculture as a primary occupation in the 7 days prior to interview, [illegible] percent are women. This percentage rises to 52.2 in the 22-45 age group and 56.2 in the 46-60 age group, which corresponds well with Beaudry and Sowa's (1990) figures.

As mentioned before, it is not possible to link individual labor inputs to individual crops, but the earlier attempt to allocate crop cultivation across gender (admittedly only for Côte d'Ivoire) resulted in cocoa, coffee, and yams being classified as always male crops, and coconut palm, oil palm, plantain and bananas, peanuts, cassava, taro, sweet potato, and vegetables always grown as "women's" crops; how does this classification match up with crops grown according to the gender of the head of household?

a. Beverage Farmers

The large number of female-headed households that grow "male" crops, cocoa and yams (coffee is grown by virtually none of the GLSS respondents) (Table 3.18), casts some doubt upon our second-best gender of head-of-household disaggregation (of course there is no calculation on the volume of crop grown by households). The largest differences in percentages of households that cultivate a crop across gender of head of household occur for rice and sorghum.

TABLE 3.17: GHANA

PRIMARY OCCUPATION (7-DAY RECALL) BY GENDER:
AGRICULTURE AND SALES - WITHIN REGION

Region	Occupation	No. Of Individuals Employed In Occupation As A % Of: All Individuals ≥ 7 Yrs Old	Individual ≥ 7 Yrs Old With Primary Occupation	% Of Individuals In This Occupation That Are Women	% Of 22-45-Year Olds In This Occupation That Are Women
Coastal	Sales	13	16	88	89
	Agriculture	46	57	43	48
Grt. Accra	Sales	30	36	79	82
	Agriculture	3	3	7	0
Forest	Sales	8	10	81	80
	Agriculture	62	74	51	55
Savannah	Sales	5	6	87	90
	Agriculture	65	82	45	51
ALL GHANA	Sales	10	12	84	85
	Agriculture	55	67	48	52

SOURCE: HADDAD (1990).

TABLE 3.18: GHANA

CROPPING PATTERNS BY REGION AND GENDER

% Of Households Reporting Crop Cultivation Activity (n=2263) That Grow:

Crop Grown	All Ghana	Male HOH	Female HOH	Coastal	Greater Accra	Forest	Savannah	Gender Balance, 15≤60 M>F	M=F	M<F
Cocoa	27	29	21	11	6	46	6	27	30	23
Coffee	1	1	0	0	0	2	0	1	1	0
Rubber	0	0	0	0	0	0	0	0	0	0
Coconut palm	6	7	3	16	3	5	1	7	6	6
Oil palm	32	34	28	30	18	45	12	38	32	29
Plantains	53	50	62	31	24	83	17	50	53	54
Bananas	21	22	18	13	3	31	10	24	21	19
Oranges	16	17	10	12	3	22	6	19	15	13
Other fruit	11	12	10	5	3	16	8	13	11	10
Timber	1	1	0	1	0	1	1	1	1	1
Cola nut	11	12	7	2	3	18	4	12	11	9
Kenef	2	2	0	0	0	0	7	1	2	2
Cotton	0	0	0	0	0	0	1	1	0	0
Peanut	22	25	14	7	15	10	60	23	22	23
Tobacco	3	3	2	0	0	1	9	3	3	3
Pineapple	10	11	8	8	9	15	3	12	11	9
Sugarcane	6	6	4	13	6	5	1	6	6	4
Cassava	86	84	94	93	70	97	61	86	86	88
Yam	46	47	40	18	6	53	57	48	43	47
Cocoyam	52	48	62	30	12	82	16	51	51	54
Potato	5	5	2	7	3	2	7	5	5	3
Maize	83	85	79	80	64	87	80	86	82	82
Rice	11	14	3	2	3	6	28	10	13	8
Sorghum/ millet	17	22	3	0	0	0	65	18	17	16
Tomato	39	39	40	38	21	39	41	38	38	41
Okro	47	49	40	35	18	41	70	49	45	49
Garden egg	28	26	33	26	12	34	19	27	27	30
Beans, peas	34	36	26	19	12	23	67	36	33	33
Pepper	60	59	63	56	30	62	62	60	60	62
Leafy veg.	11	12	8	7	0	9	18	10	10	12
Other veg.	5	4	6	1	0	6	5	5	5	5
Other crops	2	3	2	2	0	3	1	3	2	2

SOURCE: HADDAD (1990).

b. Non-Beverage Farmers

For crops labelled "women's" crops, we would not expect to see a difference in terms of the incidence of cultivation across gender of household head, because relatively few male-headed households contain no women, but across the male-female, aged 15-60 disaggregation (m,f), there are also few striking differences in incidence of "women's" food crops grown. Perhaps the overworn gender-typology corresponding to the food-cash crop distinction is too simplistic.

For Côte d'Ivoire, we are in no-person's land. Horsnall (1990) provides some sketchy data on gender occupation for his urban wage sample and Winifred Weekes-Vagliani (OECD) is conducting work-in-progress on some tables that would help locate women in various occupational sectors, but at the time of writing, they are unavailable. In addition, the U.S. Bureau of the Census International Data Base does not have any information for Côte d'Ivoire on the "economically active population by sex and occupation."

6. Summary

The lack of solid data for Côte d'Ivoire severely hampers this section. The data for Ghana are not in the most desirable form (which is a gender breakdown of Table 3.6) either. Nonetheless, we can say that women accounted for 27 percent of the government work force in Ghana in 1987 with the "clerical" figures from Table 3.14 suggesting that these women tend to be below the age of 45. The residual non-traded category for Ghana also has a low female representation over the age of 45. Ghanaian manufacturing employs a solid one-third (i.e., across all age groups) of its labor force from the female ranks. About half of Ghana's primary-occupation agriculturalists are women. Many female-headed households grow traditionally male crops; this, undoubtedly, has something to do with the way they became female-headed (e.g., widowed), and it is a factor that should not be ignored by Ghanaian agriculture policy-makers.

D. Mobility of Female Resources

1. The Wage Sector

a. Wage Discrimination

Once women are in the urban wage labor market in Côte d'Ivoire, Collier and Horsnall (1989) and Horsnall (1990) report that they actually receive a 20 percent wage premium (1986 CILSS data). They argue that wage analyses by van der Gaag et al. (1989) of 1985 CILSS data, which find no gender differential on urban wages, suffer from sample-selection biases. In other words, once account is taken of the factors that enhance the chances of entering the labor market, women are positively discriminated against in terms of wages. This has two implications: (i) urban labor is heterogeneous along the lines of gender (as if the four gender-differentiating processes were active) and (ii) a suboptimal amount of female labor is being employed (i.e., the marginal product needs to be driven down by further hiring). Collier and Horsnall (1989) conclude that "any bias is seen as being due to inferior female access to those characteristics which augment wages and to the labor market itself."

Using second year GLSS data from 1988-89, Glewwe (1990) finds similar results for Ghanaian women in the public wage sector (61 percent of Ghanaian formal wage workers), but not the private sector. Once again, gender is not the focus of the study (which is looking at how to separate the returns from schooling into acquired

ability, screening, and credentialism), and no explanation of this result is ventured. Glewwe does estimate an equation explaining labor force entry in order to correct his wage equations for selectivity bias, but he does not report the estimated coefficients. Hence, we cannot tell whether women face greater barriers to formal wage sector employment compared to men with identical characteristics. Beaudry and Sowa (1990), using 1987-88 GLSS data, also report that in a sample including all individuals that have reported labor income, "women are not observed to receive lower hourly earnings than men." This paper does not make the selectivity corrections that Glewwe emphasizes, and, again, we have no information on ease of waged labor force entry for women vis-à-vis men.

b. Access to Wage Employment

Urban: Blundell et al.(1990) and Collier and Horsnall (1989) both investigate Ivorian wage labor force participation by gender. Blundell's analysis finds that women are less likely than men to remain in work (from 1985 to 1986) in the urban sector. They attribute this to "child rearing demands," a claim they support by citing the importance of experience in determining urban wage levels. Lewis' (1982) work in Abidjan argues that fertility concerns do not keep women from working and implies that women face fewer barriers in their return to work. Blundell et al. do estimate the probability of returning to employment, and gender does seem to be an unimportant factor.

Collier and Horsnall (1989) present some striking results for wage employment participation based on a sample of the 1985-86 CILSS data. Their sample is defined as individuals aged between 16 and 65 who have left school, live in the urban cluster areas, and for whom work time in a non-family enterprise was their main means of income generation (2,324 individuals of whom 515 were classified as being in the labor market). The main feature of their results is that education (obtaining primary and post-primary education certificates) is a crucial factor for women in improving their chances of entering the labor market, whereas for men the possession of these certificates has a statistically insignificant impact on labor market entry (although it has a large impact on wage earned).

Non-wage benefits are also studied in the same paper; the male:female ratio for the receipt of benefits such as sick pay, holiday pay, pensions, and subsidized medical care is approximately 1.2:1.0, whereas for the receipt of social security (part of the official benefits system), the ratio is approximately 1.5:1.0, much more biased toward men.

Rural: In terms of the consequences for labor force entry, young people in the sample seem responsive to price incentives, although the only noticeable gender difference comes in the smaller likelihood of young females being in school in 1986, conditional on working in 1985.

No comparative analysis of this nature for Ghana is currently available.

2. General Access to Resources

a. Land

As to women's rights of land holding, the matrilineal Akan group in southern Ghana has traditionally inherited land on a kin/affine basis and enjoyed a jural right to land. In spite of the Akan women's privileged land-holding rights, the expansion of cash cropping and the increased competition for land acquisition

has disadvantaged women's land ownership. Switches from matrilineal inheritance to patrilineal inheritance patterns have been more frequently reported in the 1980s (Norton, 1988).

Women's restricted mobility, and reduced discretionary time and energy reserves resulting from household responsibilities and the traditional male sex-typing of land clearing, hampers their ability to expand land ownership and cultivation. Limited capital holdings are also an impediment to the hiring of wage labor necessary if acquired land is to be functional. Thus, women are reduced to acquiring farmland as gifts rather than through their own meritocratic efforts, and, in consequence, this land tends to be very small in acreage (Date-Bah, 1984).

b. Credit

Few Ghanaian women succeed in accumulating substantial capital, as women's sources of income are usually limited to the sale of their own produce and receipts from petty trade, and the net gain from these sources is often small. Apart from the traditional forms of self-help such as the rotating savings credit associations, women have little access to credit. Ghanaian formal credit facilities are mainly oriented to large-scale farmers, state corporations, and cash crop farmers. As women are mostly small-scale farmers and food crop farmers, they are hampered in credit allocation (Roncoli, 1985).

As to the other sources of capital, Ardayfio's (1985) study of urban Ghanaian marketing indicates that a majority of women wholesalers derive their capital from their own personal savings. Parents are the next most relied-upon source, followed by husbands. Peil (1975) explains that women in southern Ghana generally pass material goods down the female line; thus, together with profits from the sale of their own produce, women are able to accumulate funds from business interests.

The Ivorian government's programs to develop intensive agricultural systems have provided chemical inputs, farm machinery, and agricultural credit, but they have been directed primarily to men, and appear to have nurtured a group of technologically innovative, commercial male farmers (Bassett, 1988). Weekes-Vagliani (1985) also reports that in Ivorian projects to promote rice production, mainly young rural men were trained and had access to the use of credit, machinery, herbicides, and fertilizers.

For both the GLSS and CILSS data sets, it has not been possible to uncover any quantitative credit analyses; this may be due to the gender-insensitive nature of this section (see Appendix I). Nevertheless, Table 3.19 provides a head of household breakdown by gender of the credit information recorded for the GLSS data. Compared to male-headed households, female-headed households borrowed smaller sums, less frequently, and also lent out money and goods less frequently, and in smaller amounts. The worry that the cedi figures have not been adjusted for regional cost of living is mitigated somewhat by the fact that these results hold in 8 out of 10 survey regions (Haddad, 1990).

One illustration of male perceptions of the problems women face in income generation and access to capital is provided by Gordon's (1986) report on a rapid rural appraisal of the Dangbe district in Ghana's coastal savannah. One component of the appraisal involved the discussions with groups of 15-20 individuals about, among other things, problems with farming and trading and how these might be overcome. Gordon reports that the men had to be excluded from the discussions because "they invariably dominated the discussion, criticized women's contributions, and attributed their problems to ignorance and negligence rather than resource constraints."

TABLE 3.19: GHANA

CREDIT ACTIVITY BY REGION, GENDER OF HEAD OF HOUSEHOLD AND HOUSEHOLD GENDER COMPOSITION

	Credit Outstanding-Loans In And Out				
Region	% Households Borrowed Money or Goods	Amount Borrowed (Unadj. Cedis)	% Households Lent Money or Goods	Amount Lent (Unadj. Cedis)	n
Males>Females	29	31634	31	14300	821
Males=Females	31	22977	28	13808	1256
Males<Females	28	24532	29	16895	1052
All male head of household	31	28731	29	16066	2216
All female head of household	28	17697	27	12144	913
All	30	25714	29	14973	3130

SOURCE: HADDAD (1990).

c. **Information**

Both Roncoli (1985) and Date-Bah (1984) report that the Ghanaian government's policies of modernization of agriculture in the 1970s were capital-oriented, often using imported technologies considered ill-suited to Ghana's majority of small-scale farmers. Moreover the male-oriented approach of its extension agents has hampered women's access to this modern agricultural technology (improved seed and imported fertilizers).

For the 1987-88 GLSS data, only 135 of 2,184 households reporting some farm cultivation activity also reported extension contact in the 12 months prior to the interview. Most of these 135 consultations were for cocoa (60) and maize (35). Perhaps less surprising is that only 11 of the 135 (8 percent) consultations were reported by female-headed households, which constitute 27.5 percent of all farm households (although no correction for farm output is made here).

3. **Export Crop Production**

Cocoa and coffee account for the majority of export agriculture for Ghana and Côte d'Ivoire; indeed, Kraus (1988) calls cocoa exports the "crucial multiplier in Ghana's economy." He reports that producer price increases to cocoa farmers in Ghana in 1981, 1982, 1983, and 1984 left real producer prices at 33 percent of 1963 levels. Commander et al. (1989) note that these price rises may have been large enough to encourage rehabilitation of cocoa trees, but not a sufficient inducement for new planting. In 1986 Ghanaian cocoa producer prices rose to restore real prices to 85 percent of their 1963 levels, and were followed by price rises in 1987. Other activities and programs to improve output (namely new plantings) included schemes for replanting, pesticide use, and incentive consumer goods for farmers.

Because of the long price-output lags in tree crop production, it is too early to say whether cocoa production is simply retracing old steps. This section presents some micro evidence that new investment is taking place, but the data below present simply a snapshot within the much longer time series necessary for a full evaluation of supply response.

Specifically, we are interested in the gender dimension of export cropping; does it undermine female roles and can women overcome any barriers to entry that exist?

There are many documented cases in Côte d'Ivoire and Ghana where the integration of cash crops into existing agricultural activities has led to an erosion of female agricultural income, because of a more limited access to land. Among the Ivorian Guoro (central Côte d'Ivoire) cultural group, coffee and cocoa are the main commercial products. Although these cash crops do not have the social value of food crops such as rice and yams, the land which has, in the past, been given to women for growing food (food which they would then sell) is frequently given by the elders to young men for coffee growing--the profits of which are, in turn, handed over to the elders (Weekes-Vagliani, 1985).

Along with expansion of cash crops, women increasingly expend their own labor on farm land other than their own. For instance, the central Ivorian Baoule women help their husbands grow cash crops, by carrying the grains of coffee and cocoa-pods. However, the women's share of the produce depends on husbands' goodwill. The time Baoule women devote to their husbands' crops takes away from their own income-earning activities

such as growing cassava and peanuts. It is rare to see women sell these crops at local markets anymore. The south-west Ivorian Bete women also have to work a longer day as they continue to produce food while working on their husbands' cash crop land (Weekes-Vagliani, 1985).

In the coastal Adioukrou district of Côte d'Ivoire, government reorganization of land use beginning in the early 1960s converted a great deal of land into palm nut tree fields. However, this land reform deprived women of land traditionally available to them without supplying them with any alternate sources of subsistence, income, and employment (Traore, 1984).

That women in Ghana generally hold smaller-scale farms with lower productivities compared to men who likely specialize in cash crop production is well documented, but it should be remembered that women's farming activities are not exclusively confined to food crops, especially in the case of female-headed households (Fapohunda, 1983).

In the migrant areas of central and western Ghana, in spite of women's long-term contribution of labor and financial advice in order to develop newly-opened/purchased cocoa farms, the mature farms are generally considered to belong to men and the arrangement of providing wives with their own farmland in return to their contribution is often vague. However, case studies show that the newly-opened migrant community maintained matrilineal land lineage rights and that women were often given land through their male matrikin (Okali, 1983).

But have women, or female-headed households been able to grow these crops? We can answer the latter but not the former question with the Living Standards Surveys. As it is the longer-run planting of cash-crop trees upon which increases in productive capacity ultimately lie, the reported results of Commander et al. (1989) indicate that Ghanaian producer price rises have begun to have the desired effect on incentives to plant, at least in the Ashanti region in 1986/87. Across all cocoa farms in this region the percentages of area planted to cocoa that were too young:full production:end of production were reported as 24:49:27.

Table 3.20 provides national estimates for Ghana that are in line with those of Commander et al. (46:43:10), but what is particularly interesting here is that this cocoa profile is even more heavily skewed toward replanting for the female-headed households. The bottom panel of Table 3.20 also shows female-headed households being well represented in the household groups (i.e., groups 2, 5, 7, and 8) that report more younger tree crop plantings (across all crops).

4. Summary

There is little wage discrimination in the formal wage market against women; if anything, they are paid a premium for their labor. This suggests that male and female labor is not particularly substitutable, and is not encouraging from the point of view of successful adjustment. Furthermore, education is a key factor enabling entry into the formal labor markets in both countries, and, as we have seen in Section III.C.2, females are relatively unsuccessful in their attempts to attain the necessary levels. In rural Côte d'Ivoire, there seems to be little gender difference in the ability of young people to respond to agricultural price incentives, although boys are more likely to do so while pursuing their education.

TABLE 3.20: GHANA

AGE PROFILE OF VARIOUS TREE CROPS GROWN, BY GENDER OF HEAD OF HOUSEHOLD

	All Households				Male-Headed				Female-Headed			
Crop	% Young	% Full	% Old	n	% Young	% Full	% Old	n	% Young	% Full	% Old	n
Cocoa	46	43	10	609	45	45	10	485	53	35	11	124
Coffee	24	75	1	19	21	77	1	17	50	50	0	2
Rubber	0	100	0	1	0	0	0	1	0	0	0	0
Coconut	46	50	4	134	46	51	3	114	49	45	6	20
Oil palm	46	50	4	725	48	48	4	556	39	58	3	169
Plantain	49	48	4	1186	48	49	3	815	50	47	4	371
Bananas	37	60	4	446	35	62	4	344	43	54	4	102
Oranges	33	64	3	291	32	65	2	241	39	56	4	50
Other fruit	32	64	3	240	34	63	3	184	27	70	3	56
Wood	57	43	0	16	66	34	0	13	20	80	0	3
Cola nut	17	78	4	199	19	76	5	159	13	86	1	40

	Does Household Have A Tree Crop That Is:			% Of Households That Are		
	Young	Full	Old ?	Male hoh	Female hoh	n
1.	no	no	no	80.0	20.0	5
2.	yes	no	no	74.2	25.8	726
3.	no	yes	no	75.9	24.1	1062
4.	no	no	yes	86.2	13.8	29
5.	yes	yes	no	76.0	24.0	1590
6.	no	yes	yes	81.5	18.5	108
7.	yes	no	yes	58.3	41.7	36
8.	yes	yes	yes	76.7	23.3	309
			total	2929	936	3856
			row%	75.8	24.2	100.0

Key: young = tree crop too young to produce
full = full tree crop production
old = near end of tree crop production

SOURCE: HADDAD (1990).

In terms of access to resources other than their own labor, women's land rights seem more vague than men's, their use (if not access to) of credit is less than men's, and they receive less help from government agricultural extension workers than do men. In terms of export-cropping, it is too early yet to assess the extent to which it is new investment or simply a retracing of old steps that is responsible for improved output. The signs are encouraging for Ghanaian female-headed households improving cocoa production through the rehabilitation of existing trees, but we do not know if those Ghanaian households which have only young tree crops are new growers, or simply had a tradition of tree-crop growing, but have left their crops unattended for more than the lifetime of the tree.

IV. DISCUSSION AND CONCLUSIONS

A. Is Gender an Important Dimension Along Which to Analyze the Distributional Consequences of Structural Adjustment in These Two Countries?

Many of the gender patterns displayed in the tables presented in this paper are preserved once other factors (most notably, region) are controlled for (see Haddad, 1990). From these tables, if region seems to be an important dimension along which to conduct the distributional analysis, then so, too, is gender.

The next step in the analysis is to disaggregate using gender as a second-order disaggregation. The use of gender as a first-order disaggregation as in many of the tables in this paper is bound to cloud many even sharper gender differences, but, more importantly, it is sure to distract the analyst from the choice of a truly policy-useful first-order disaggregation. In other words, women as a group are probably less homogenous than men.

The mere fact that descriptive tables demonstrate gender differences is not sufficiently convincing, however; many intervening variables, measured and unmeasured, are not controlled for. The multivariate analyses of Collier and Horsnall (1989) and Glewwe (1990) lend a definite air of long-overdue quantitative credibility to the analysis of gender and adjustment. It would now be interesting to perform similar analyses in order to gain some appreciation of the relative importance of other factors which may impede labor mobility (ethnicity, age, region of birth, nationality) in different occupational sectors.

In answer to the question posed in this subsection heading, the somewhat circumstantial evidence in this paper would suggest that, yes, gender is an important dimension along which to examine the distributional effects of economic adjustment, although how important relative to other disaggregations remains to be seen. For another disaggregation to be ranked above gender as a factor affecting an individual's ability to cope with burdens and thrive upon opportunities associated with a process of change such as adjustment, it would have to impose a powerful differentiation upon: role-model formation, the establishment of rights and obligations, and the sectoral location of labor and the mobility of resources.

1. What We Know

The introduction to this paper billed it as a review of what we know and what we do not know about gender and economic adjustment in Ghana and Côte d'Ivoire. What we do not know is substantial as outlined below, but what we do know is not trivial either. For Côte d'Ivoire (and Ghana probably, although we need to see Glewwe's 1990 first-stage wage labor participation estimates to be sure), education is the grease that lubricates the labor allocation wheel which drives the adjustment engine. Education levels are very different across males and females in both countries, in terms of attendance, subject profiles, and achievement. Studies of the determinants of educational enrollment and attainment need to be initiated, if only to investigate the importance of higher time allocation burdens for women compared to men (higher opportunity costs of time across all age and occupational status groupings) in effecting the decisions underlying the demand for education.

2. What We Do Not Know

It is difficult being so equivocal about the conclusions derived above in terms of the impact of economic adjustment on women in Ghana and Côte d'Ivoire. If we were less given to sitting on the fence in this particular instance, we would simply be generating another paper that someone would have to wade through in order to be presented with an unsupported opinion as to the impact of adjustment on women.

To give some idea as to the underlying edifice upon which this equivocation is based, the reader is referred to the matrix below.

Ghana: Structural Adjustment Information Requirements Matrix

	Beverage Farmer	Food Farmer	Traders	Government Employee	Residual Non-Traded
• Relative price changes	-	+	+	same	-
• Income levels relative to the mean	+	-	-	++	same
• Relative income levels by gender	?	?	?	?	?
• % of households with a high income dependence	1	40	10	5	5
• Classification of food	non-traded/urban	unprotected		import-substitute	
• Female sectoral representation %	(not insignif)	>50	>80	at low ages	30
• Is female labor mobile?	(possibly)	yes	yes	no	no?
• Relative outcome for women	?	?	+	?	?

Key: + = above national average, - = below national average

One could also construct such a matrix for Ghana's stabilization phase, and the corresponding two matrices for Côte d'Ivoire. The choice was made to highlight the Ghanaian structural adjustment matrix because it is the most complete in terms of data requirements. We know about relative price changes in Ghana for 1983-88, we know about the distribution of welfare in 1987-88, we can classify food as a non-tradable, and we know about female labor mobility in the formal wage sector. However, in order to assess the absolute and relative outcome for women vis-à-vis men, we need better information (actually more appropriate aggregations) on female labor force by occupation.

For the remaining three matrices, information becomes more scarce. For instance, for the Côte d'Ivoire stabilization matrix we need early 1980s information on the distribution of welfare (we have seen how Glewwe (1986) has struggled with data comparability problems), income source dependence, female representation in each occupation, and female resource mobility estimates by occupation. Moreover, in addition to female occupational representation, we need to know welfare levels by gender in those occupational groups.

B. Policy Directions

The above analysis suggests that, in the formal sector at least, the processes that lead to observed gender-differentiation in decision-making are strong in both Côte d'Ivoire and Ghana. The fact that women earn a premium in the waged sector suggests rigidities along gender lines--evidence that gender attitudes have become costly in terms of foregone output. The fundamental policy question that needs to be addressed is: do we need to devote more resources to reducing female barriers to resource acquisition and transfer in Ghana and Côte d'Ivoire, or do we adopt a gender-blind approach to poverty alleviation, while surgically removing specific bottlenecks toward female integration into the supply-side of economic adjustment?

To begin to think about this question, let us turn to two questions: (1) Can gender-related constraints frustrate the objectives of structural adjustment? and (2) Does structural adjustment undermine the role of women thus making it more likely that the answer to question (1) is "yes"?

The evidence presented in this paper suggests that the gender-mediated constraints that can put a brake on adjustment are strong. If women's roles are undervalued in Ghana and Côte d'Ivoire pre-adjustment (as suggested by lower educational attainment and heavier time burdens), then a gender-neutral position will surely increase the pressure on that brake. And this is a fairly optimistic scenario, for there is a large ethnographic literature on Ghana and Côte d'Ivoire that documents the marginalization of women farmers due to the type (i.e., bimodal) of agricultural commercialization that has occurred in these countries in the not so distant past (see Weekes-Vagliani, 1985 and Roncoli, 1985).

As far as the Ghanaian government is concerned, the policy response seems to embrace the gender-neutral end of the spectrum of options. The Ghanaian Programme of Actions to Alleviate the Social Costs of Adjustment (PAMSCAD) includes projects designed to generate employment, facilitate the delivery of basic needs, improve access to education and credit, and rehabilitate community infrastructure. The cost estimate attached to the existing PAMSCAD initiative to "Enhance the Economic Opportunities for Women in Development" (Government of Ghana, 1987) is relatively small compared to other project initiatives.

Whether gender-blind approaches are gender-neutral or further reinforce the gender-differential status quo, and whether true gender-neutrality is the most efficient way of improving productivity, are matters for detailed intervention evaluations, but either way it is clear that female illiteracy has a high opportunity cost (a small relaxation of this constraint would at least allow the individual to provide the signature required to secure credit). Education reform, in terms of relaxing the constraints that exclude women from all levels of schooling, should be at the heart of any attempt to invigorate the supply-side response of the Ghanaian and Ivorian economies.

There is an old and famous west African saying: "If you educate a man, you educate an individual. If you educate a woman, you educate the nation" (Aidoo, 1983). If this report has confirmed anything, it is that there is more than a grain of truth to this old proverb.

APPENDIX I: DATA SOURCES

SDA/LSMS DATA SOURCES

The rationale and methodologies underpinning the data collection efforts of the SDA unit and participant country statistical services are outlined in the SDA framework document (World Bank, 1990). By definition, the multi-subject surveys will be used for a myriad number of analyses and suffer, therefore, to a greater or lesser extent, from a lack of incisiveness according to the particular issue under analysis. The SDA surveys are based upon Living Standards Measurement Survey (LSMS) modules, although there is less of an emphasis placed upon the data being used solely for research purposes. The SDA unit's solution to the "fundamental conflict" inherent in any multi-purpose survey--the breadth versus depth of coverage tradeoff--is to undertake surveys in several different forms: household intensive, household extensive, and community.

A. SDA and LSMS Household and Community Surveys

Intensive household surveys form part of the SDA's integrated survey (IS) approach to analysis of the social costs of adjustment, while the extensive household surveys are labelled as part of the priority survey (PS) approach. The ISs cover a smaller number of households in greater depth than the PSs, and are mostly concerned with the whys and hows of what is occurring rather than what is occurring per se. The ISs are intended to be diagnostic, while the PSs are intended for monitoring purposes.

We have not seen any of the PSs or any analysis of data collection from them, and because it is not clear from the tense in which the SDA's framework paper is written, it is not obvious whether any PSs have completed enumeration yet. The SDA framework paper describes the design of the PS; sample sizes of up to 8,000-10,000 households, on a cluster sampling basis, covering the same ground as the ISs but in a much curtailed form, so that interview time is restricted to one hour at most.

1. Household Surveys

In principle, the ISs cover 3,200 households for Ghana (beginning 1987-88), and 1,600 households in Côte d'Ivoire (beginning 1985-86), on a permanent, annual basis, with half the sample forming a two-year rolling panel, and are fully described in Grootaert (1986). The nationally representative samples are obtained by a drawing of a sample of enumeration districts or clusters (200 in Ghana, 100 in Côte d'Ivoire) and then randomly choosing 16 households within each cluster. The clusters also form the sampling units for the community surveys (a cluster is equated to a community).

The surveys were designed to be self-weighing, i.e., the regional subsamples are supposed to be representative of the regional population; however, there were some initial problems in this regard for Abidjan households in the Côte d'Ivoire survey. Using an independent survey source from the Agence d'Urbanisme d'Abidjan, Scott (1988) reports that the initial cluster selection in Abidjan overrepresented the wealthiest group and underrepresented the poorest. Results to be presented below arouse similar suspicions for the Ghana sample.

The content of the surveys is summarized below:

Section	Target respondent
Round 1	
• Household roster	All individuals in the household
• Education	Household members aged 7 and above
• Health	All household members
• Employment and time use	Household members aged 7 and above
• Migration	Household members aged 15 and above
• Respondents for the second round	Head of household
• Housing	Head of household
Round 2	
• Agriculture and livestock	Household members who are holders
• Food processing and consumption of own produce	Most knowledgeable household member
• Expenditures	Most knowledgeable household member
• Non-farm enterprises	Manager of the enterprise
• Income transfers; miscellaneous income and expenditures	Head of household
• Assets and credits	Head of household
• Anthropometric measurement	Children aged 3-60 months

Source: World Bank (1990)

The survey questionnaire is administered in two rounds, partly to reduce respondent fatigue (target total interview time is 5-6 hours although Scott (1988) reports that for Côte d'Ivoire separate interview rounds have taken up to 4 hours), partly to provide a bounded period for the collection of flow information (how much has the household spent on goods since my last visit?), and finally to facilitate data cleaning.

There are unanswered questions as to the success of the bounded recall period approach. Does it matter if the target recall time of 14 days is not always met (only 61 percent of the time for Côte d'Ivoire in 1985-86), and the dates of the interview are not readily recorded as separate variables onto the diskettes? The former is the more serious question; if expenditures are a function of recall time, how valid is it to aggregate up to a common time (annual, for example) frame?

One of the striking successes of the LSMS data collection initiative has been the high quality of the data handed to the researcher for policy analysis in terms of within-record consistency. Entry-point range checks on continuous variables, and acceptable discrete value checks for qualitative variables are invoked by the dedicated personal computer software. A number of across variable, within-record checks are also performed (is an

individual identified as a boy, defined elsewhere as a daughter of the household head?). We are not aware of any on-site across-record checks, but it is eminently reasonable that these be performed elsewhere at a later date prior to beginning full-scale analyses. There have been some doubts raised as to the generality of the dedicated software used for data entry and whether some standard packages (e.g., SPSS/PC DATA ENTRY) could do the job just as well to allow the exploitation of any existing pool of software knowledge.

Second-stage analyses of the Ghana and Côte d'Ivoire data in order to construct a set of household income and expenditure aggregates and sub-aggregates have been undertaken at the Development Economics Center at the University of Warwick, England. Amongst other things, the methodology developed here confronts problems of outliers, imputed values, and definitional criteria for income and food expenditure and is fully documented in great detail in a series of papers by Johnson, McKay, and Round (1988, 1989, 1990).

2. Community Surveys

The community surveys have been collected for Côte d'Ivoire, but we are not sure whether they have been completed for Ghana. The surveys are conducted at the cluster level; consequently, there are 100 data points for Côte d'Ivoire and 200 for Ghana.

Data collection covers subjects such as health (e.g., distance to the nearest doctor, nurse, pharmacy; what is the major health problem in the area, what is the major health service delivery problem in the area?), education (e.g., distance to nearest primary school, school attendance rates), labor markets (e.g., what are the typical daily wage rates for men, women, and children?), and infrastructure (distance to the nearest paved road, proportion of households using electricity, main water sources). It is proposed that the method of collection will vary; sometimes only one respondent will be questioned (usually by the enumerator team supervisor); sometimes a panel of respondents or sometimes even administrative records will be sufficient to record the information.

Although the definition of a primary sampling unit (i.e., a cluster) as a "community" seems arbitrary, the realization that such aggregated survey data have a complementary role to play in the analyses of meso-household issues is a real step forward. In the absence of community data, one could still control for community-specific unobserved effects by using household variables differenced from the mean values of the same household variables from within the cluster (household within fixed-effects estimation); this is equivalent to including k-1 dummy variables in the ordinary least-squares regressions to represent the k clusters. The problem with this technique is that it allows us to control for cluster effects but does not allow us to separate out the more important from the less important effects. A good example of how cluster-specific effects (e.g., food prices) can be controlled for is provided by Alderman (1990c) in his examination of the determinants of nutritional status for Ghana; although it would have been helpful if he had included the OLS estimates by way of comparison.

Strauss (1990) shows how useful the community data are by explicitly including variables from the community survey. The thrust of Strauss' paper is the exploitation of the community data, and the differences this could make to policy conclusions. Using the CILSS 1985-86 data which are available for households in the rural clusters (57 out of 100), he shows that community-level variables, when interacted with mothers'education, are at least as important as household and individual level information in the determination of standardized heights and weights of preschoolers.

B. Limitations for Gender Analyses

The three main limitations with the intensive data sets as regards gender analyses are (1) small cell sizes; (2) problems with definition of female-headedness; and (3) not enough gender disaggregation of household data. Problems (1) and (3) are only solvable by increasing sampling expenditures (although the return to an extra gender-disaggregated question here or there could have a large payoff in terms of our level of understanding), while problem (2) could be solved by a few extra questions tying down exactly what was meant by a self-declared female-headship.

Before specific examples of these problems and limitations are provided, we must look at a more general frustration pertaining to the regional breakdown of data: survey regions do not correspond exactly to administrative regions. Whether this non-overlap is necessary in order to get the sample weighting correct, to avoid political sensitivities (the administrative-region location of a household is only discernable by eyeballing a map and locating each cluster within its administrative region) or, to ensure that each administrative region is covered by more than one enumeration team is unclear. Especially when so many of the gender roles are defined in the literature of Section III according to region and ethnic group, it would be useful to be able to readily control for these effects when searching for more functionally-mediated relationships.

1. Small Cell Sizes

In terms of the statistical significance of results, rapidly declining cell sizes are a problem for the descriptive analyses that inevitably precede the multiple regression and multivariate analyses. The main problem is that we are forced, at least in the simpler descriptive analyses, to employ gender as a primary rather than a secondary disaggregation. The use of gender as a first-order disaggregation (e.g., a comparison of poverty levels across male- and female-headed households) is bound to cloud many even sharper gender differences, but, more importantly, it is sure to distract the analyst from the choice of a truly policy-useful primary disaggregation. We are forced to regard female-headed households as an undifferentiated group, rather than be permitted to employ the male-/female-headed disaggregation as secondary to some functional primary disaggregation (e.g., is the household involved in the traded or non-traded sectors, or are they producers of mainly importables or exportables?).

2. Actual and/or Self-Reported Female-Headedness

In a preliminary analysis of the Ghana Living Standards Survey (GLSS) data, Haddad (1990) finds marked survey region variations in the percentage of households that are self-declared (self-reported) female-headed (from 8.4 percent in the Savannah to 43.9 percent in the Upper Forest). Not much survey information is gender-disaggregated at the individual level; therefore, the self-reported female/male head of household dichotomy is necessarily (as well as easily) recorded, perhaps in order to test whether these households are more vulnerable to the short-term consequences of stabilization policies. Because regional differences could reflect spatial and/or enumerator team differences in the definition of the "female-headed" state and how that state was arrived at, it is important to check the self-reported definition against an actual definition (see Section III.A.1.a).

It would be helpful if the enumerators were asked to probe a little more deeply into the respondent's particular interpretation of her declaration as the household head. In addition, it would be useful to know how a household became female-headed. For the 1987-88 Ghana data, of the 29.1 percent (914 out of 3,136) of households declared as female-headed, 46.9 percent (429 out of 914) of the household heads were married, with

the husband not cohabiting in 91.4 percent (413 out of 429) of these households. After the first section of the questionnaire, no more information is collected for the 413 non-cohabiting spouses, because they fail to be classified as household members. If we knew why the husband left, how long ago, and where he went to, we would be better able to assess vulnerability.

3. The Need for More Gender Disaggregations

We are unable to link individuals to crops through the amount of non-hired labor allocated to a particular crop. It is too bad that we cannot verify the extent to which the division of labor exists across gender (agricultural task breakdowns) and the extent to which different individuals are responsible for different crops (who markets and buys inputs). Furthermore, while current landholding is an important indicator of current living standards, information on how the land was acquired may tell us something about gender-differential access to land. Perhaps these are moot points in that everything is performed on a collective basis, but we should at least have the data for confirmation.

The situation is better for hired labor (the use of which was recorded by most Ghanaian farms in the 1987-88 data) with the collection of expenditure data on hired labor, but the questionnaire does not facilitate the conversion of this expenditure data into person-days of hired labor input, although a crude attempt to do this could be made with wage information from the community questionnaire.

Information on agricultural extension support for Ghana in 1987-88 showed that only 135 out of the 2,184 households reporting some farm activity also reported extension contacts in the 12 months prior to interview. Some questions probing a little more into the reasons for non-consultation (perhaps there were no extension agents in the farmers' locale) would have helped provide an explanation for this low contact rate, especially as the female-headed households were disproportionately represented among the non-consulters.

In an issue related to control of inputs and outputs, are the individuals declared at the end of the first round of the questionnaire as "most knowledgeable" about a certain household activity the actual decision-makers? An attempt to match up this self-declared knowledge with evidence of primary involvement in that activity would be an important validatory exercise which would better allow us to appreciate household decision-making processes. In addition, the questions relating to who is best informed about a certain activity (and there are only five activities) create an apparent sharpness in the division of household knowledge because there is no questionnaire category for "joint best-informed" or "second best informed."

From section 5 of the questionnaire, it is possible to construct a partial time allocation profile for each household member aged 7 and above. The profile consists of the number of hours spent in the 7 days prior to interview in three categories: main job, secondary job, and work in the home (defined as including food preparation, household chores, and fetching water/fuel). These time allocation data could be made much more complete with the addition of two questions: one on time spent in a tertiary job, the other on time spent in job search.

Time allocation questions are only asked with respect to two jobs: if an individual is employed in a tertiary occupation, the questionnaire asks about the wage rate but not about the time commitment. It turns out that for the Ghana 1987-88 data this does not matter too much; of 11,376 respondents, only 58 recorded that they received income from a tertiary job. The job search problem is potentially more serious; for the Ghanaian sample in 1987-88, 368 of the 11,378 respondents were looking for paid work during the 7-day recall period. This

figure is still small, but may systematically bias any gender-differentiated analysis if the gender/relationship-to-household head composition of the searchers differs substantially from those not looking for jobs; however, for Ghana this was not the case.

The sections on fuel and water collection, a crucial complement to an analysis of time burdens, are hampered by the fact that the questionnaire does not actually identify who undertakes the tasks of fuel and water collection.

The credit section of the questionnaire is household-based, restricting the gender disaggregation to a comparison of male- and female-headed households. Another problem is that the codes for the question "why was this money borrowed?" are not sufficiently disaggregated so as to assess whether the loan (although fungible) was motivated by a need to help the household better cope with, or break out of, poverty. Some questions on prior credit application experiences would have been very useful in further describing differential access to credit sources.

As we have seen, educational attainment marks one of the most striking areas of gender differences in both Ghana and Côte d'Ivoire. Although school attendance rates diverge sharply after the ages of 7-8, for the Ghanaian data, once a child is in school, there seems to be no difference in the numbers of hours actually spent attending classes. Unfortunately, we have no information on course subjects other than the groupings: commercial, vocational, technical, and out-of-school technical.

Finally, the fact that the morbidity data are self-reported severely reduces any potential it had for shedding light on a gender-differentiated analysis of the effects of structural adjustment. As well as being an important indicator of poverty, the general level of morbidity is an important constraint on the ability to cope and/or thrive in an adjustment environment. The main problem with self-reported morbidity data is that the tolerance of a departure of individual health status from the individual's own definition of his/her norm is dependent on income and education, as is the definition of the norm itself. Consequently, self-reported morbidity data are often positively correlated with income, as is the case with the GLSS data (Boateng et al., 1990). Clearly, these problems could severely jeopardize regression analyses, let alone simple two-way breakdowns.

Note: For references to Ivorian socioeconomic databases other than the CILSS, see Kanbur (1990, p.50).

APPENDIX II: NOTES ON DATA SERIES DEFINITIONS

GHANA

[1]1. Numeraire is a weighted average of prices of clothing, furniture, and beverages/tobacco in the CPI. (All prices from CBS data except where stated to the contrary.) Used as a proxy for the consumer price of manufactures.

2. Exports are prices of exports to domestic producers. For cocoa, producer prices were used whilst other exports were assumed to be untaxed. Index was calculated using CBS and IFS data; details available from authors.

3. Cocoa prices are producer prices.

4. Manufacturing price is the GDP deflator for manufacturing. Used as a proxy for ex-factory price of manufactures.

5. Food price is from the CPI.

6. Distribution price is GDP deflator for retail and wholesale distribution plus restaurants and hotels.

7. Residual non-tradables price is an index of current values divided by constant price outputs for construction, transport and communication, financial and business services.

8. Trade policy index is ratio of domestic to world prices of exportables divided by corresponding ratio for importables (each ratio set to 100 in 1978). Domestic prices are (1) for importables and (2) multiplied by (1) for exportables. World prices are proxied by CBS export and import price series.

COTE D'IVOIRE

[1]A similar divergence in the proxies for the domestic price of importables in Ghana was explained by reference to increased price controls affecting producer prices but not consumer prices. However, the presence of a qualitatively similar price differential in Côte d'Ivoire which cannot be explained in this way does not discredit the validity of the explanation for at least part of the phenomenon in Ghana since the differential is far larger in that country.

[2]1. Numeraire is a weighted average of prices of clothing and household equipment in the CPI (WAMU data).

2. Exports are prices of exports to domestic producers. This was calculated using the same procedures as for Ghana, except that taxation of coffee was treated in the same manner as that of cocoa and WAMU data used.

3-8. Details as given for corresponding Ghanaian series in Table 3a. UN ECA data used for sectoral GDP figures; WAMU data used for export, import and disaggregated CPI prices.

APPENDIX III: INDICATORS

STANDARD INDICATORS

A number of indicators have been used in this study and they are summarized here.

Anthropometric and Health Indicators These indicators can be used to assess overall effects of economic contraction associated with adjustment as well as specific gender impacts. The data are often split by sex so that one can isolate differences in health and nutrition by sex. Some data link health and nutrition to family structure so one can examine the role of female-headedness to adjustment. The morbidity and mortality statistics can also be used to reflect male-female differences, especially in the context of childbearing and breastfeeding.

1. Weight for height - indicates degree of acute malnutrition
2. Height for age - indicates degree of chronic malnutrition
3. Standard deviation in height
4. Hospital admissions - regionally biased, biased by reductions in presentations due to reductions in service levels
5. Infant mortality
6. Morbidity
7. Mortality
8. Incidence of specific diseases

Education Indices 1 - 4 are generally available on a gender-disaggregated basis although there are sometimes variations in standards of measuring literacy. They are useful for taking a static measure of male-female differences although changes in the pattern of enrollment over time can reveal gender differences in the burden of adjustment. Indices 5 and 6 are more useful for determining the degree to which general education standards suffer as a result of restraint measures.

1. Adult literacy
2. Primary enrollment
3. Secondary enrollment
4. Post-secondary enrollment
5. Student/teacher ratio
6. Classroom space, books and other teaching aids per student

Household Income and Expenditure The best way of analyzing these data to reveal gender characteristics is to divide them according to the gender of the head or according to the sex composition of total family members. Key features to look for are the differences in the level and composition of expenditures by gender.

1. Consumption patterns by sex of head
2. Food budget share
3. P-alpha This is a poverty measure that takes all the families below a specified poverty line using income or expenditure and weights them according to how far below the line they fall.

Labor Force and Wages Most of this information, if it is available, comes from the labor force survey. In a few countries, there are data on intergenerational sector or occupational shift that give important insights into mobility patterns. Where these data exist, they should be analyzed closely because they give a good indication of the dynamics of:

1. Participation rates
2. Employment by sector
3. Unemployment by sector
4. Employment by occupation
5. Unemployment by occupation
6. Underemployment
7. Parent-child occupational mobility
8. Parent-child sectoral mobility

Wage, Price and Cost-of-Living Indices The first three indices show both static gender differences in earnings and the changes that accompany adjustment. Indices 4 - 6 show the general effects of adjustment on real incomes. Index 7 is combined with information on participation rates by sector and sex to determine the production side effects of adjustment on gender.

1. Sector wage rates
2. Occupation wage rates
3. Real wages
4. Consumer price index
5. Index of food staple prices
6. Index of least cost-minimum nutrition food basket
7. Output prices by sector

Public Sector Expenditure As in the other areas, there are both a consumption and a production side to consider here. The gender composition of public sector employment and wage patterns is important for gauging the gender impact of public service retrenchment. The differences in male-female dependence on various public services also indicate how public service cuts affect the sexes differently.

1. Public sector employment and wages by sex
2. Public sector spending by function

APPENDIX IV: A GENDER AND ADJUSTMENT NETWORK

CONTACTS AND RESOURCES

Pamela Sparr, Project Coordinator: Women and Adjustment maintains an information network for individuals working on gender analyses of structural adjustment policies (SAPs).

For further information contact:

Pamela Sparr
Project Coordinator
Women and Adjustment
United Nations Information Center
1889 F Street, N.W.
Washington, D.C. 20006

Tel. (202) 289-8670

A database of addresses as of August 1990 is given on the following pages.

HALEH AFSHAR
Department of Politics
University of York
Heslington, York Y01 5DD
England
Office phone: 44-904-433554
Home phone: 44-904-412380
FAX: 44-0904-433433

Editor along with Carolyne Dennis of Women, Recession and Adjustment in the Third World (forthcoming--see references).

PEGGY ANTROBUS
Women & Development Unit
University of the West Indies
School of Continuing Studies
Pinelands
St. Michael, Barbados
Work phone: 809-436-6312
FAX: 809-429-4854

Peggy has done a lot of work analyzing the impact of SAPs in the Caribbean and on women specifically. She has published this in various places, most recently in a book for PACCA (see references below). Good contact point for work being done in this area in the Caribbean--and soon to be the world, as late this year she assumes the position of General Coordinator of DAWN (Development Alternatives with Women for A New Era--Spanish acronym MUDAR). DAWN has a number of case studies on women and SAPs--is deciding how to publish them at this point.

AZITA BERAR AWAD
Rural Employment Branch
International Labour Organization
4 Route des Morillons
CH-1211 Geneva 22
Switzerland
Work phone: 41-22-799-6906

Azita has planned to do a series of case studies 1990-91 in Africa-village surveys of the impact of SAPs on rural women. She is looking at cuts in public expenditures and social services and structural adjustment policies and price changes, and the responses of women as farmers. She is planning similar research programs for Asia and Latin America in 1992. She will do at least 3-4 African countries. She wants to use in-country folks to do the research with a two-fold aim. One is to get better data/analysis of what is happening. The second is to see this as an exercise to sensitize local economists to gender issues and to train local women specialists in how to do economic analysis. She could use leads of local people in these three regions who might be suitable collaborators in this work. Let her know of leads!

LOURDES BENERIA
217 West Sibley Hall
Cornell University
Ithaca, New York 14853
Work phone: 607-255-2148
[redacted]

Lourdes coordinated a workshop a couple of years ago, and is now helping to edit those papers into a book (see references) on household responses to economic crisis and SAPs. Lourdes is chairing a group formed at the April NGLS "Structural Transformation" conference in NYC to look at feminist alternatives to SAPs.

GUNSELI BERIK
Economics Department
Graduate Faculty
New School for Social Research
65 Fifth Avenue
New York, NY 10003
Work phone: 212-741-5722
Msg: 212-741-5717

Working with Nilufer Cagatay on the impact of SAP-related export-oriented manufacturing policies on Turkish women's employment/labor force status.

NILUFER CAGATAY
2 Jane Street, Apt. 5C
New York, NY 10014
Office phone: (201) 529-7633 <Ramapo College in New Jersey>
[redacted]

Nilufer teaches economics at Ramapo. She is studying how industrialization (comparing export-oriented with import-substitution varieties) affects women's employment in Turkey. She is also participating in the work group formed at the April NGLS "Structural Transformation" conference in NYC to look at feminist alternatives to SAPs.

GRACIA CLARK
Center for Afroamerican and African Studies
The University of Michigan
200 West Engineering Building
500 East University
Ann Arbor, Michigan 48109-1092
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[redacted]

Gracia is an anthropologist who participated in the University of Florida conference and has collaborated with Takyiwaa Manuh of the University of Ghana on a paper for the book coming out of the conference. Gracia has done fieldwork interviewing women traders in Ghana on the impact of SAPs at selected time intervals (1979, 1983-84, 1989-90).

PATIENCE ELABOR-IDEMUDIA
Department of Sociology
The Ontario Institute for Studies in Education
252 Bloor Street West
Toronto, Ontario
Canada M5S 1V6

Patience contributed a case study to the conference and book coming from the University of Florida on African Women Farmers and SAPs. She did field work with ag extension agents in her home country of Nigeria to examine the impact of SAPs on women farmers and their households from 1985 to 1989.

DIANE ELSON
Department of Economics
Faculty of Economic and Social Studies
University of Manchester
Manchester M13 9PL
England
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or 275-4838
[redacted]

Working extensively in this area, especially in terms of theoretical understanding/ critiques of SAPs from a gender perspective. Current work includes: chapter on women and SAPs in Afshar/Dennis book; response to Commonwealth Secretariat Report; a paper on Structural Adjustment and Women's Role in Household Food Security for the F.A.O., and is editing a book "Male Bias in the Development Process" (forthcoming by University of Manchester Press).

MARIA SAGRARIO FLORO
7402 16th Avenue
Takoma Park, Maryland 20912
[redacted]
Work phone: 202-885-3774

Sergy has done research on the impact of export-oriented agriculture policies on rural women in Mindinao. Sergy attended the Structural Transformations NGO conference in NYC earlier this year and is a part of the workgroup led by Lourdes Beneria to look at alternatives to SAPs from a feminist perspective. Sergy is also trying to do research into alternative development financing (if a country wants to avoid WB/IMF loans). She teaches economics at American University.

JOAN FRENCH
Sistren Research
20 Kensington Crescent
Kingston 5, Jamaica
Work phone: 809-929-6171
[redacted] [redacted]

Good contact point for work being done in the Caribbean. Joan and her colleagues at Sistren do research on the impact of SAPs on women, and utilize this to do political organizing (via their theater troupe, Sistren, and other means). Joan is helping to organize a big Caribbean conference this fall to look at organizing around the debt crisis, SAPs, and mobilizing to press for alternatives.

CHRISTINA GLADWIN
Food and Resource Economics Department
G-155D McCarty Hall
University of Florida
Gainesville, FL 32611
Work phone: 904-392-5071
[redacted]

Christy has both an Anthropolgy and Ag-Economics background. She is also affiliated with the University's Center for African Studies. She helped pull together a conference on SAPs and African Women Farmers held at the University earlier this year and is the editor of a book based on the conference papers.

LAWRENCE HADDAD
Economics Department
University of Warwick
Coventry CV4 7AL
England
Office phone: 44-203-523035

Hired as World Bank consultant to examine impact of SAPs on women in Ghana. WB's Social Dimensions of Adjustment unit will put out his "Gender and Poverty in Ghana" as a working paper soon. Lawrence will come to Washington later this year to begin work with the International Food Policy Research Institute (in October). He also has been working with Paul Collier in the African unit of Oxford University on further gender and SAP research in Ghana and Côte d'Ivoire. Paul is the coordinator for a big WB project in this regard which Lawrence says is "wide-ranging." Paul can be reached at 44-865-271-084 or Fax # 44-865-271-094.

WENDY HARCOURT
Society for International Development
Civilta' del Lavoro
00144 Rome
Italy
Office phone: 39-6-591-7897 or 592-5506
FAX: 39-6-591-9836

Ms. Harcourt is the editor of the bulletin for Women In Development Europe (WIDE) and is the Associate Editor for SID. Good contact point. WIDE did a conference on structural adjustment, published results in WIDE Report 1989.

MERVAT HATEM
3723 Windom Place, NW
Washington, DC 20016
[redacted]
Work phone: 202-636-6847

Mervat teaches political science at Howard University. She has been doing research on Egypt's political and economic crisis and how it is affecting the sexual division of labor, with particular emphasis on middle class women, women employed in the state sector. She will do a case study for the book on SAPs and unemployment in the state sector, comparing how middle class and working class women are affected.

INTERNATIONAL CENTER FOR RESEARCH ON WOMEN (ICRW)
Paul Carlson
1717 Massachusetts Avenue, NW
Washington, DC 20036

ICRW has a long-standing interest in this issue and has worked on it in a variety of ways. They may be doing a book on impact of SAPs on women. Had a meeting 28-29 May in Chile with various scholars from Latin America and the Caribbean to discuss their research on SAPs and women. Paul Carlson is heading up this effort, and is editing final drafts of papers. Will decide soon (if not by the time this goes out) whether will do a book. In any event, they will do a conference in DC on this subject for policy makers. The Overseas Development council will participate. They will report out the consequences of their hemispheric research efforts and spell - out policy implications.

Some of the scholars who have been a part of the ICRW effort are:

1) ELIZABETH JELIN
C.E.D.E.S.
Avenida Pueyrredon, #510
70 Piso, Depto. B
(1032) Buenos Aires, Argentina
Work phone: 54-1-961-8182

She investigates the social impact of adjustment on women and contributed to UNICEF's "The Invisible Adjustment."

2) JOYCELYN MASSIAH
Director, ISER
University of the West Indies
Cavehill
P.O. Box 64
Bridgetown, Barbados
Phone: 425-1012
PBX: 4251310

3) LIC. CLARA JUSIDMAN
Montes Jimalaya #209
1100 Mexico DF
Mexico

4) MOLLY POLLACK
PREALC
Avenida Kennedy 4820
Dept. 71
Las Condes
Santiago, Chile
Work phone: 486-5000

5) ALBERTO MINUJIN
Argentina
Reach via Rosalea Cortez, below

6) ROSALEA CORTES
Juncal 3786-9C
(1425) Buenos Aires, Argentina
[redacted]

7) JOHN HUMPHREY
Institute of Development Studies
University of Sussex
Brighton, BN1 9RE
UK
Office phone: 44-723-60-62-61
[redacted]

Doing work in Brazil and women's employment.

8) MARFIL FRANCKE
D.E.S.C.O.
Cinchi Roca 2704
Lince Lima 14
Lima, Peru
Office phone: 011-5114-451-978

INTERNATIONAL DEVELOPMENT RESEARCH CENTER <CANADA>
Eva Rathgeber
Office phone: (613) 236-6163

They are doing work in this area. Insufficient time to discover specifics. They are a good Canadian contact point.

SWARNA JAYAWEERA -
Centre for Women's Research (CENWOR)
12 1/1 Ascot Avenue
Colombo 5
Sri Lanka
[redacted]
Work phone: 94-1-502-153 (may not be up-to-date)
FAX: 94-1-580721

Contributed case study for Commonwealth Secretariat report on the gender-specific impact of SAPs in Sri Lanka. Has done specific work in the area of export-oriented manufacturing policies and impact on women in Sri Lanka.

SUSAN JOEKES
Institute of Development Studies
University of Sussex
Brighton, England
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Susan has been working on gender analysis of SAPs for several years as one of the key people at IDS. She has participated in the Jt. Consultative Group, and most recently has done a paper for the ILO concerning the household as a factor in adjustment.

NAILA KABEER
Institute of Development Studies
University of Sussex
Brighton, England
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FAX: 44-273-678420

Have not been able to reach Naila yet. Along with Susan Joekes and John Humphrey, are key people at IDS working on SAPs and gender issues. Have been told she has done research on Morocco or another Northern African nation and is planning new research on Uganda. Wrote a paper on neo-liberalism, the fascination with "the market" and how this is not good for women.

BRENDA KANU
Commonwealth Secretariat
Marlborough House
Pall Mall
London SW1Y 5HX
England
Work phone: 44-71-839-3411

Brenda was part of the C.S.'s project to commission several case studies on the gender impact of SAPs (not yet publicly available). She is also interested in looking at SAPs and women traders in her own country of Ghana.

CAROLINE MOSER
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The London School of Economics & Political Science
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London WC2A 2AE
England
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[redacted]: [redacted]7

Caroline has done a lot of thinking/publishing about the methodology of assessing the gender-specific impact of structural adjustment as well as empirical research on its effects on women in Guayaquil, Ecuador. She is concerned about the need for longitudinal studies. Will come to the World Bank in October to begin a 2-year stint in the Urban Division. In the first year she will do a policy review and look at extant work analyzing the effects of SAPs on urban women. In the second year, she will design a research program, commissioning research projects on this subject. Anyone interested in this area should contact her.

CLARA OSINULU
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[redacted]

Contributed to book by University of Florida based on African Women Farmers and SAPs conference. This is a collaboration with Lillian Trager on "New Women's Organizations in Nigeria: One Response to Structural Adjustment."

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John Clark, following in the footsteps of a 1989 booklet (66 pages), Zambia: Debt & Poverty, is leading OXFAM's cooperative work with the Filipino Freedom from Debt coalition to publish an in-depth popular analysis of debt and structural adjustment in the Philippines, which includes a look at women's lives.

Eugenia Piza (WID section). One of her current projects is related to women and SAPs. In Southern Africa, OXFAM is training trainers in "economic literacy" so they can work with grassroots women so the women can see and assess the impacts of these economic policies on their own lives.

HELEN SAFA
Center for Latin American Studies
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University of Florida
Gainesville, FL 32611
Office Phone: (904) 392-0375

Professor of Anthropology and Latin American Studies. Helen's current work is on the debt crisis in the Caribbean and she has contributed to the PACCA book. A particular focus now is on the impact of export processing employment on women, looking at the Dominican Republic, Puerto Rico, and Cuba.

CONSTANTINA SAFILIOS-ROTHSCHILD
Chair, Department of Gender Studies in Agriculture
Agricultural University
Hollandsweg 1
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She is starting a research project, probably funded by the Netherlands Development Corporation, examining the impact of SAPs on men and women farmers in Africa. She will look at countries which are self-sufficient in food and those which are not--as she says this makes quite a difference in the impact of SAPs. She wants to connect the macro level with the micro. Looking at the household (changes in income, productivity, access to land, etc.) and the changes in agricultural institutions and the allocation of funds in the agriculture sector. She is very concerned about food security and will look at the consequences for both cash and subsistence crops. This is a 4-year project which will be carried out by herself, an economist, and local collaborators. In the first year, macro data will be collected in 7 countries. From this, 4 nations will be selected for the 3-year intensive study. She says not all women farmers suffer from structural adjustment, and she is concerned that not enough work has been done to get rid of the cash crop=male/food crop=female <in Africa> stereotype. She would love to obtain good ag studies on the impact of SAPs on women for a class she will teach this fall and would appreciate leads.

EVE SANDBERG
Institute of War and Peace Studies
Columbia University
420 West 118th Street
New York, NY 10027
Office phone: (212) 854-3558 (Political Science Dept.) or 854-4633 (Institute of African Studies) or 854-4616 (War & Peace Studies).

She is working on SAPs and women in Zambia.

CATHLEEN SHELDON
(213) 451-8934
(formerly of UCLA's Center for Women's Studies)

Cathleen is pulling together a panel on Women and Structural Adjustment in Sub-Saharan Africa for the African Studies Assn. meeting later this year.

ANITA SPRING
Chief
Women in Agricultural Production
and Rural Development Service
Food & Agriculture Organization of the UN
Via delle Terme di Caracalla 00100
Rome, Italy
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Anita says FAO could use references of African researchers available to do agriculture-related case studies.

CHEYWA SPINDEL
Instituto de Estudos Economicos, Sociais e Politicos de Sao Paulo
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1973 CEP 01255 (Sumare)
Soa Paulo, Brasil
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Interested in the connection between SAPs, rural women's economic status (low-income women), and environmental problems in Brazil.

AILI TRIPP
710 Oakton Street, #106
Evanston, IL 60202
[redacted]
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Just finished defending her thesis: "The Urban Informal Economy and the State in Tanzania". Contributed chapter for book edited by Beneria and Feldman on "The Impact of Crisis and Economic Reform on Women in Urban Tanzania". Another paper: "Deindustrialization and the Growth of Women's Economic Associations and Networks in Urban Tanzania" for UNU/WIDER project "Empowering Women in the Casualised Trades." Also written in terms of urban household economy in Tanzania.

UNICEF
3 U.N. Plaza
New York, NY 10017

Eva Jespersen, Planning Officer (Adjustment) and Rolf Van der Hover (212) 326-7710 worked on Structural Adjustment with a Human Face. Eva continues to work on SAP impact on women. Kathy Cravero (212) 326-7334 also handles women's issues for them.

JOANN VANEK
Statistical Office
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Joann is hard at work helping to spearhead efforts within the UN to change the methodology and nature of national income statistics collection to enable all of us to do a better gender analysis. (We would be better able to track women's economic contribution and how economic changes are affecting men and women differentially.) She follows work in the area of SAPs and women and this is influencing her work.

RELATED FORTHCOMING AND RECENTLY PUBLISHED MATERIAL

1) Publisher: ILO. Author: Ingrid Palmer. "Gender Issues in Structural Change in African Economies." Expected publication date: end-year 1990. Expected audience: academics, policy makers. Content: Theory and case studies. This is part of the ILO's Women, Work and Development series.

2) Publisher: Macmillan. Editor: David Seddon. General book on structural adjustment and its impact. Two of the case studies will have a gender focus. Unclear when it will be published. David is at the School of Development Studies, University of East Anglia, England. Work phone: 44-6-0356161.

3) Publisher: Macmillan. Editors: Haleh Afshar & Carolyne Dennis. "Women, Recession and Adjustment in the Third World." Content: Three theoretical papers and 5 case studies and two essays on policies/politics of the issue. (Table of Contents included.)

4) Publisher: ? Editors: Lourdes Beneria and Shelly Feldman, tentative title "Economic Crises, Household Strategies and Women's Work" or "Crisis, Households and Persistent Poverty," forthcoming late 1990 or early 1991.

5) Diane Elson has a paper on household food security (and relationship to SAPs) coming out from the FAO's nutrition service. Contact Elizabeth Morris Hughes in Rome.

6) Publisher: University of Florida Press. Editor: Christina Gladwin. Title: Structural Adjustment and African Women Farmers.

7) Publisher: Commonwealth Secretariat. "Engendering Adjustment for the 1990s", is considered an excellent contribution to the field. The secretariat has also sponsored several country-specific case studies, which are not yet publicly available.

8) Publisher: Zed Press, UK. Author: Kathy McAfee (of OXFAM-US). "Storm Signals: Failed Models and Development Alternatives in the Caribbean." Expected out in 1991. Includes sections on impact of SAPs.

9) Carmen Diana Deere (coord.), Peggy Antrobus, Lynn Bolles, Edwin Melendez, Peter Phillips, Marcia Rivera and Helen Safa, "In the Shadows of the Sun: Caribbean Development Alternatives and US Policy," Westview Press, Boulder, forthcoming 1990. Sponsored by PACCA, includes look at SAPs, their effects and alternatives.

10) World Bank, Social Dimensions of Adjustment unit: Structural Adjustment and Poverty: A Conceptual, Empirical and Policy Framework (Report No. 8393-AFR - Feb. 9, 1990); Poverty and the Soc. Dim. of Struc. Adj. in Côte d'Ivoire by Ravi Kanbur (March 1990); A Poverty Profile of Ghana 1987-88 by Boateng, Ewusi, Kanbur and McKay (Working Paper #5, June 1990); Assessment of the Social Dimensions of Struc. Adj. in Sub-Saharan Africa FY90 Activity Report and FY91 Work Plan (RAF/86/037/A/01/42 June 1, 1990); The Social Dimensions of Adjustment in Africa, A Policy Agenda (March 1990); Staff Appraisal Report, Republic of Cameroon Social Dimensions of Adjustment Project, April 24, 1990 (Report No. 8451- CM), Zaire Women In Dev. Country Assessment and Strategy Paper, June 28, 1990 (Report 8537-ZR) by WID Division; How Adjustment Programs Can Help the Poor, Discussion Paper 71 (stock number 11434); World Development Report 1990: Poverty.

Two working papers from the Social Dimensions of Adjustment unit on gender analysis in Ghana and Côte d'Ivoire are scheduled for August 1990.

11) United Nations Development Fund for Women (UNIFEM), Occasional paper No. 10. "Preliminary Assessment of Impact of Stabilization and Structural Adjustment Programmes on Selected UNIFEM-Supported Projects." Contains general assessment of SAPs and specific case studies in The Gambia, Tanzania, the Philippines, Sri Lanka, and Mexico.

12) "Funding Ecological and Social Destruction: The World Bank and International Monetary Fund." The Bank Information Center, Editor. 43 page document (with pictures, written for general audience). Product of international NGO forum on WB and IMF lending held in DC in September 1989. Available free from The Bank Information Center, 2000 P Street, NW Suite 515, Washington DC 20036, telephone 202-822- 6630. Bulk of document is case studies for Bolivia, Brazil, Costa Rica, Ghana, Jamaica, India, Indonesia, and the Sudan.

PEOPLE NOT CONTACTED, BUT KNOWN TO BE WORKING IN THIS AREA

1) Noeleen Heyzer
Asia-Pacific Development Center
Pesiaran Duta
P.O. Box 12224
50770 Kuala Lumpur
Malaysia
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FAX: 603-2550316

2) Diane Russell, a graduate student at Boston University is doing work on SAPs and women in Zaire.

3) Jonathan Sanford of the Congressional Research Service, Washington, DC is studying the impact of SAPs on the poor.

4) A. Tibaijuka
Economic Research Bureau
University of Dar-Es-Salaam

5) Patricia McFadden (from Swaziland)
at Cornell University or c/o IDRC and Akwasi Aidoo in Dakar
Dakar telex: 21674

6) Musimbi Kanyoro
Lutheran World Federation (Geneva)
Office phone: 41-22-791-6425

7) Lourdes Arizpe
Campestre, 54
Mexico 01060 D.F.
Mexico
[redacted]
FAX: 5273175981

Among Lourdes' contributions is work on the impact of the debt crisis on rural women in Mexico. This was part of the UNICEF book, The Invisible Adjustment.

8) Georgena Ashworth
CHANG (a UN recognized NGO)
London, England

She publishes country handbooks on the position of women. Suggested as person who has tremendous on-the-ground contacts in many countries.

9) Institute for African Alternatives (London, England)
Phone: 44-71-251-1503

Said to have done some case studies of women and SAPs.

10) WOMEN & DEBT NETWORK (EUROPE)
Rienske van der Bij at V.E.V.O.
Utrecht, The Netherlands
Office phone: 31-30-331277

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